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

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**FORM 10-Q**

**QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Quarterly Period Ended September 30, 2016

OR

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File No. 001-36609

**NORTHERN TRUST CORPORATION**

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of  
incorporation or organization)

36-2723087

(I.R.S. Employer  
Identification No.)

50 South LaSalle Street  
Chicago, Illinois

(Address of principal executive offices)

60603

(Zip Code)

Registrant's telephone number, including area code: (312) 630-6000

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

Indicate by check mark whether the registrant has submitted electronically 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  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 definitions of "large accelerated filer," "accelerated filer," and "small reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company	<input type="checkbox"/>

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

226,431,104 Shares – \$1.66 2/3 Par Value  
(Shares of Common Stock Outstanding on September 30, 2016)

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**NORTHERN TRUST CORPORATION**  
**QUARTERLY REPORT ON FORM 10-Q**  
**FOR THE QUARTERLY PERIOD ENDED SEPTEMBER 30, 2016**

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**CONSOLIDATED FINANCIAL HIGHLIGHTS  
(UNAUDITED)**

<b>CONDENSED INCOME STATEMENTS (In Millions)</b>	Three Months Ended September 30,			Nine Months Ended September 30,		
	2016	2015	% Change <sup>(1)</sup>	2016 ^	2015	% Change <sup>(1)</sup>
Noninterest Income	\$ 910.6	\$ 886.6	3%	\$ 2,809.8	\$ 2,765.2	2%
Net Interest Income	303.1	268.9	13	910.6	780.7	17
Provision for Credit Losses	(3.0)	(10.0)	(70)	(4.0)	(24.5)	(84)
Noninterest Expense	843.0	812.3	4	2,596.8	2,455.8	6
<b>Income before Income Taxes</b>	<b>373.7</b>	<b>353.2</b>	<b>6</b>	<b>1,127.6</b>	<b>1,114.6</b>	<b>1</b>
Provision for Income Taxes	116.1	118.6	(2)	361.6	380.1	(5)
<b>Net Income</b>	<b>\$ 257.6</b>	<b>\$ 234.6</b>	<b>10%</b>	<b>\$ 766.0</b>	<b>\$ 734.5</b>	<b>4%</b>

**PER COMMON SHARE**

Net Income — Basic	\$ 1.09	\$ 0.97	12%	\$ 3.23	\$ 3.03	7%
— Diluted	1.08	0.96	13	3.21	3.00	7
Cash Dividends Declared Per Common Share	0.38	0.36	6	1.10	1.05	5
Book Value — End of Period (EOP)	38.41	36.31	6	38.41	36.31	6
Market Price — EOP	67.99	68.16	—	67.99	68.16	—

**SELECTED BALANCE SHEET DATA (In Millions)**

	September 30, 2016	December 31, 2015	% Change <sup>(1)</sup>
<i>End of Period:</i>			
Assets	\$ 120,085.0	\$ 116,749.6	3%
Earning Assets	111,765.6	106,848.9	5
Deposits	99,471.3	96,868.9	3
Stockholders' Equity	9,579.8	8,705.9	10

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2016	2015	% Change <sup>(1)</sup>	2016	2015	% Change <sup>(1)</sup>
<i>Average Balances:</i>						
Assets	\$ 116,382.5	\$ 109,924.1	6%	\$ 114,909.9	\$ 109,718.3	5%
Earning Assets	107,843.8	100,809.2	7	106,363.7	101,110.5	5
Deposits	93,773.9	91,027.0	3	93,287.9	89,979.2	4
Stockholders' Equity	9,230.6	8,710.5	6	8,906.0	8,597.9	4

**CLIENT ASSETS (In Billions)**

	September 30, 2016	December 31, 2015	% Change <sup>(1)</sup>
Assets Under Custody/Administration <sup>(2)</sup>	\$ 8,495.7	\$ 7,797.0	9%
Assets Under Custody	6,706.8	6,072.1	10
Assets Under Management	945.8	875.3	8

<sup>(1)</sup> Percentage calculations are based on actual balances rather than the rounded amounts presented in the Consolidated Financial Highlights.

<sup>(2)</sup> For the purposes of disclosing Assets Under Custody/Administration, to the extent that both custody and administration services are provided, the value of the assets is included only once.

<sup>(3)</sup> The nine months ended September 30, 2016 results have been adjusted to reflect the early adoption of ASU No. 2016-09, "Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting" (ASU No. 2016-09). Please refer to Note 2, "Recent Accounting Pronouncements," of the Notes to Consolidated Financial Statements for further discussion on the impact to the Corporation's previously reported quarterly results.

## SELECTED RATIOS AND METRICS

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016 <sup>^</sup>	2015
<i>Financial Ratios:</i>				
Return on Average Common Equity	<b>11.71%</b>	10.91%	<b>11.87%</b>	11.68%
Return on Average Assets	<b>0.88</b>	0.85	<b>0.89</b>	0.90
Dividend Payout Ratio	<b>35.2</b>	37.5	<b>34.3</b>	35.0
Net Interest Margin <sup>(1)</sup>	<b>1.14</b>	1.08	<b>1.17</b>	1.06
	September 30, 2016		December 31, 2015	
	Advanced Approach	Standardized Approach	Advanced Approach	Standardized Approach
<i>Capital Ratios:</i>				
<b>Northern Trust Corporation</b>				
Common Equity Tier 1	<b>11.8%</b>	<b>11.2%</b>	11.9%	10.8%
Tier 1	<b>13.1</b>	<b>12.3</b>	12.5	11.4
Total	<b>14.5</b>	<b>14.0</b>	14.2	13.2
Tier 1 Leverage	<b>7.9</b>	<b>7.9</b>	7.5	7.5
Supplementary Leverage <sup>(2)</sup>	<b>6.6</b>	<b>N/A</b>	6.2	N/A
<b>The Northern Trust Company</b>				
Common Equity Tier 1	<b>12.0%</b>	<b>11.1%</b>	11.6%	10.4%
Tier 1	<b>12.0</b>	<b>11.1</b>	11.6	10.4
Total	<b>13.6</b>	<b>12.9</b>	13.1	12.0
Tier 1 Leverage	<b>7.0</b>	<b>7.0</b>	6.7	6.7
Supplementary Leverage <sup>(2)</sup>	<b>5.9</b>	<b>N/A</b>	5.6	N/A

<sup>(1)</sup> Net interest margin is presented on a fully taxable equivalent (FTE) basis, a non-generally accepted accounting principle (GAAP) financial measure that facilitates the analysis of asset yields. The net interest margin on a GAAP basis and a reconciliation of net interest income on a GAAP basis to net interest income on an FTE basis are presented on page 28.

<sup>(2)</sup> Effective January 1, 2018, Northern Trust will be subject to a minimum supplementary leverage ratio of 3 percent.

<sup>(3)</sup> The nine months ended September 30, 2016 results have been adjusted to reflect the early adoption of ASU No. 2016-09. Please refer to Note 2, "Recent Accounting Pronouncements," of the Notes to Consolidated Financial Statements for further discussion on the impact to the Corporation's previously reported quarterly results.

## PART I – FINANCIAL INFORMATION

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

#### THIRD QUARTER CONSOLIDATED RESULTS OF OPERATIONS

##### General

Northern Trust Corporation (the Corporation) is a financial holding company that is a leading provider of asset servicing, fund administration, asset management, fiduciary and banking solutions for corporations, institutions, families and individuals worldwide. The Corporation focuses on managing and servicing client assets through its two client-focused reporting segments: Corporate & Institutional Services (C&IS) and Wealth Management. Asset management and related services are provided to C&IS and Wealth Management clients primarily by the Asset Management business. Except where the context requires otherwise, the term “Northern Trust,” “we,” “us,” “our” or similar terms mean the Corporation and its subsidiaries on a consolidated basis.

The following should be read in conjunction with the consolidated financial statements and related footnotes included in this report. Investors also should read the section entitled “Forward-Looking Statements.”

##### Overview

Net income per diluted common share was \$1.08 in the current quarter, up from \$0.96 in the third quarter of 2015. Net income was \$257.6 million in the current quarter as compared to \$234.6 million in the prior-year quarter. Annualized return on average common equity in the current quarter was 11.7%, up from 10.9% in the prior-year quarter. The annualized return on average assets was 0.9% as compared to 0.8% in the prior-year quarter.

Revenue of \$1.21 billion was up \$58.2 million, or 5%, from \$1.16 billion in the prior-year quarter, primarily reflecting higher trust, investment and other servicing fees and net interest income, partially offset by lower foreign exchange trading income and other operating income. Noninterest income increased \$24.0 million, or 3%, to \$910.6 million from \$886.6 million in the prior-year quarter.

Net interest income increased 13% to \$303.1 million in the current quarter as compared to \$268.9 million in the prior-year quarter, due to a higher net interest margin and growth in earning assets.

The provision for credit losses was a credit of \$3.0 million in the current quarter, as compared to a credit provision of \$10.0 million in the prior-year quarter.

Noninterest expense totaled \$843.0 million, up \$30.7 million, or 4%, from \$812.3 million in the prior-year quarter, primarily attributable to higher compensation, other operating expense, and employee benefits.

The components of noninterest income are provided below.

**Table 1: Noninterest Income**

<u>Noninterest Income</u> (\$ In Millions)	Three Months Ended September 30,			
	2016	2015	Change	
Trust, Investment and Other Servicing Fees	\$ 788.3	\$ 749.1	\$ 39.2	5%
Foreign Exchange Trading Income	53.6	62.9	(9.3)	(15)
Treasury Management Fees	15.0	16.1	(1.1)	(6)
Security Commissions and Trading Income	20.4	20.4	—	1
Other Operating Income	33.1	38.1	(5.0)	(14)
Investment Security Gains (Losses), net	0.2	—	0.2	N/M
Total Noninterest Income	<u>\$ 910.6</u>	<u>\$ 886.6</u>	<u>\$ 24.0</u>	<u>3%</u>

Trust, investment and other servicing fees are based primarily on: the market value of assets held in custody, managed or serviced; the volume of transactions; securities lending volume and spreads; and fees for other services rendered. Certain market-value-based fees are calculated on asset values that are a month or quarter in arrears. For a further discussion of trust, investment and other servicing fees and how they are derived, refer to the “Reporting Segments” section.

### THIRD QUARTER CONSOLIDATED RESULTS OF OPERATIONS (continued)

#### Noninterest Income (continued)

Assets under custody/administration (AUC/A) and assets under management form the primary drivers of our trust, investment and other servicing fees. For the purposes of disclosing AUC/A, to the extent that both custody and administration services are provided, the value of the assets is included only once. At September 30, 2016, AUC/A were \$8.50 trillion, up \$379.9 billion, or 5%, from \$8.12 trillion at June 30, 2016.

The following table presents Northern Trust's assets under custody, a component of AUC/A, by reporting segment.

**Table 2: Assets Under Custody**

<u>Assets Under Custody</u> (\$ In Billions)	September 30, 2016	June 30, 2016	September 30, 2015	Change Q3-16/Q2-16	Change Q3-16/Q3-15
Corporate & Institutional	\$ 6,173.6	\$ 5,838.6	\$ 5,460.6	6%	13%
Wealth Management	533.2	514.2	495.8	4	8
Total Assets Under Custody	\$ 6,706.8	\$ 6,352.8	\$ 5,956.4	6%	13%

The following table presents the allocation of Northern Trust's custodied assets by reporting segment.

**Table 3: Allocations of Assets Under Custody**

<u>Assets Under Custody</u>	September 30, 2016			June 30, 2016			September 30, 2015		
	C&IS	WM	Total	C&IS	WM	Total	C&IS	WM	Total
Equities	43%	55%	44%	42%	54%	43%	43%	53%	44%
Fixed Income	39	23	38	40	24	39	38	24	37
Cash and Other Assets	18	22	18	18	22	18	19	23	19

The 13% increase in consolidated assets under custody from \$5.96 trillion as of September 30, 2015 to \$6.71 trillion as of September 30, 2016 primarily reflected the impact of favorable markets and new business, partially offset by the unfavorable impact of foreign currency movements.

The following table presents Northern Trust's assets under management by reporting segment.

**Table 4: Assets Under Management**

<u>Assets Under Management</u> (\$ In Billions)	September 30, 2016	June 30, 2016	September 30, 2015	Change Q3-16/Q2-16	Change Q3-16/Q3-15
Corporate & Institutional	\$ 703.6	\$ 672.3	\$ 661.5	5%	6%
Wealth Management	242.2	233.9	225.3	4	8
Total Assets Under Management	\$ 945.8	\$ 906.2	\$ 886.8	4%	7%

The following table presents Northern Trust's assets under management by investment type.

**Table 5: Assets Under Management by Investment Type**

<u>(\$ In Billions)</u>	September 30, 2016	June 30, 2016	September 30, 2015
Equities	\$ 479.3	\$ 456.4	\$ 437.8
Fixed Income	162.8	156.3	150.1
Cash and Other Assets	189.8	185.2	176.9
Securities Lending Collateral	113.9	108.3	122.0
Total Assets Under Management	\$ 945.8	\$ 906.2	\$ 886.8

### THIRD QUARTER CONSOLIDATED RESULTS OF OPERATIONS (continued)

#### Noninterest Income (continued)

The following table presents the allocation of Northern Trust's assets under management by reporting segment.

**Table 6: Allocations of Assets Under Management**

<u>Assets Under Management</u>	September 30, 2016			June 30, 2016			September 30, 2015		
	C&IS	WM	Total	C&IS	WM	Total	C&IS	WM	Total
Equities	<b>52%</b>	<b>47%</b>	<b>51%</b>	52%	46%	50%	51%	44%	49%
Fixed Income	<b>13</b>	<b>29</b>	<b>17</b>	13	29	17	13	29	17
Cash and Other Assets	<b>19</b>	<b>24</b>	<b>20</b>	19	25	21	18	27	20
Securities Lending Collateral	<b>16</b>	—	<b>12</b>	16	—	12	18	—	14

The 7% increase in consolidated assets under management from \$886.8 billion at September 30, 2015 to \$945.8 billion as of September 30, 2016 was primarily due to favorable global equity markets and inflows in cash, equity and fixed income products, partially offset by lower securities lending collateral.

Changes in assets under custody and under management are in comparison to the twelve-month increase in the S&P 500 index of 12.9% and increase in the MSCI EAFE index (USD) of 3.5%.

The following table presents activity in consolidated assets under management by investment type.

**Table 7: Activity in Consolidated Assets Under Management by Investment Type**

(\$ In Billions)	Three Months Ended		
	September 30, 2016	June 30, 2016	March 31, 2016
Beginning Balance of AUM	\$ 906.2	\$ 900.0	\$ 875.3
Inflows by Investment Type			
Equity	27.2	34.9	29.4
Fixed Income	13.1	18.6	11.4
Cash & Other Assets	109.5	83.6	94.6
Securities Lending Collateral	27.1	21.5	20.4
Total Inflows	176.9	158.6	155.8
Outflows by Investment Type			
Equity	(26.6)	(31.4)	(28.1)
Fixed Income	(8.8)	(14.9)	(10.2)
Cash & Other Assets	(100.2)	(84.7)	(80.3)
Securities Lending Collateral	(21.4)	(19.3)	(18.2)
Total Outflows	(157.0)	(150.3)	(136.8)
Net Inflows	19.9	8.3	19.0
Market Performance, Currency & Other	19.7	(2.1)	5.7
<b>Ending Balance of AUM</b>	\$ 945.8	\$ 906.2	\$ 900.0

Foreign exchange trading income totaled \$53.6 million in the current quarter, down \$9.3 million, or 15%, compared to \$62.9 million in the prior-year quarter. The decrease generally reflected lower client volumes as compared to the prior-year quarter.

### THIRD QUARTER CONSOLIDATED RESULTS OF OPERATIONS (continued)

#### Noninterest Income (continued)

Other operating income totaled \$33.1 million, down \$5.0 million, or 14%, compared to \$38.1 million in the prior-year quarter. The decrease is based primarily on impairment charges and loss on sales related to a non-strategic loan and lease portfolio. The components of other operating income are provided below.

**Table 8: Other Operating Income**

<u>Other Operating Income</u> (\$ In Millions)	Three Months Ended September 30,		Change	
	2016	2015		
Loan Service Fees	\$ 14.0	\$ 14.8	\$ (0.8)	(6)%
Banking Service Fees	13.6	11.9	1.7	14
Other Income	5.5	11.4	(5.9)	(53)
Total Other Operating Income	\$ 33.1	\$ 38.1	\$ (5.0)	(14)%



### THIRD QUARTER CONSOLIDATED RESULTS OF OPERATIONS (continued)

#### Net Interest Income

The following table presents an analysis of average balances and interest rate changes affecting net interest income.

**Table 9: Average Consolidated Balance Sheets with Analysis of Net Interest Income**

NORTHERN TRUST CORPORATION						
THIRD QUARTER						
(Interest and Rate on a Fully Taxable Equivalent Basis)						
(\$ In Millions)	2016			2015		
	Interest	Average Balance	Rate <sup>(5)</sup>	Interest	Average Balance	Rate <sup>(5)</sup>
<b>Average Earning Assets</b>						
Federal Funds Sold and Securities Purchased under						
Agreements to Resell	\$ 4.4	\$ 1,613.2	1.08%	\$ 1.3	\$ 1,080.4	0.49%
Interest-Bearing Due from and Deposits with Banks <sup>(1)</sup>	15.4	8,232.2	0.74	22.1	11,229.7	0.78
Federal Reserve and Other Central Bank Deposits	21.8	20,829.6	0.42	13.0	17,319.7	0.30
Securities						
U.S. Government	22.4	7,292.5	1.22	14.1	5,034.6	1.11
Obligations of States and Political Subdivisions	3.3	734.7	1.80	1.8	103.3	6.80
Government Sponsored Agency	38.1	17,583.7	0.86	34.9	16,198.2	0.86
Other <sup>(2)</sup>	46.7	17,647.8	1.05	36.4	16,705.0	0.86
Total Securities	110.5	43,258.7	1.02	87.2	38,041.1	0.91
Loans and Leases <sup>(3)</sup>	204.1	33,910.1	2.39	188.2	33,138.3	2.25
<b>Total Earning Assets</b>	<b>356.2</b>	<b>107,843.8</b>	<b>1.31</b>	<b>311.8</b>	<b>100,809.2</b>	<b>1.23</b>
Allowance for Credit Losses Assigned to Loans and Leases	—	(192.9)	—	—	(256.0)	—
Cash and Due from Banks and Other Central Bank Deposits <sup>(4)</sup>	—	1,933.8	—	—	2,683.5	—
Buildings and Equipment	—	441.3	—	—	435.6	—
Client Security Settlement Receivables	—	1,200.7	—	—	1,031.8	—
Goodwill	—	525.5	—	—	532.4	—
Other Assets	—	4,630.3	—	—	4,687.6	—
<b>Total Assets</b>	<b>\$ —</b>	<b>\$ 116,382.5</b>	<b>—%</b>	<b>\$ —</b>	<b>\$ 109,924.1</b>	<b>—%</b>
<b>Average Source of Funds</b>						
Deposits						
Savings and Money Market	\$ 3.2	\$ 15,025.7	0.08%	\$ 2.4	\$ 15,168.4	0.06%
Savings Certificates and Other Time	2.1	1,450.3	0.58	2.2	1,487.0	0.57
Non-U.S. Offices — Interest-Bearing	14.7	51,468.6	0.11	13.3	50,107.9	0.11
Total Interest-Bearing Deposits	20.0	67,944.6	0.12	17.9	66,763.3	0.11
Short-Term Borrowings	6.6	6,961.0	0.38	1.1	3,878.5	0.11
Senior Notes	11.8	1,496.3	3.11	11.7	1,497.2	3.10
Long-Term Debt	6.8	1,406.9	1.91	5.5	1,374.3	1.60
Floating Rate Capital Debt	0.9	277.4	1.24	0.6	277.3	0.86
<b>Total Interest-Related Funds</b>	<b>46.1</b>	<b>78,086.2</b>	<b>0.23</b>	<b>36.8</b>	<b>73,790.6</b>	<b>0.20</b>
Interest Rate Spread	—	—	1.08	—	—	1.03
Demand and Other Noninterest-Bearing Deposits	—	25,829.3	—	—	24,263.7	—
Other Liabilities	—	3,236.4	—	—	3,159.3	—
Stockholders' Equity	—	9,230.6	—	—	8,710.5	—
<b>Total Liabilities and Stockholders' Equity</b>	<b>\$ —</b>	<b>\$ 116,382.5</b>	<b>—%</b>	<b>\$ —</b>	<b>\$ 109,924.1</b>	<b>—%</b>
<b>Net Interest Income/Margin (FTE Adjusted)</b>	<b>\$ 310.1</b>	<b>\$ —</b>	<b>1.14%</b>	<b>\$ 275.0</b>	<b>\$ —</b>	<b>1.08%</b>
<b>Net Interest Income/Margin (Unadjusted)</b>	<b>\$ 303.1</b>	<b>\$ —</b>	<b>1.12%</b>	<b>\$ 268.9</b>	<b>\$ —</b>	<b>1.06%</b>

### THIRD QUARTER CONSOLIDATED RESULTS OF OPERATIONS (continued)

#### Net Interest Income (continued)

##### ANALYSIS OF NET INTEREST INCOME CHANGES DUE TO VOLUME AND RATE

(In Millions)	Three Months Ended September 30, 2016/2015		
	Change Due To		
	Average Balance	Rate	Total
Earning Assets (FTE)	\$ 22.9	\$ 21.5	\$ 44.4
Interest-Related Funds	2.6	6.7	9.3
Net Interest Income (FTE)	\$ 20.3	\$ 14.8	\$ 35.1

- (1) Interest-Bearing Due from and Deposits with Banks includes the interest-bearing component of Cash and Due from Banks and Interest-Bearing Deposits with Banks as presented on the consolidated balance sheets.
- (2) Other securities include certain community development investments and Federal Home Loan Bank and Federal Reserve stock, which are classified in other assets in the consolidated balance sheets as of September 30, 2016 and 2015.
- (3) Average balances include nonaccrual loans. Lease financing receivable balances are reduced by deferred income.
- (4) Cash and Due from Banks and Other Central Bank Deposits includes the non-interest-bearing component of Federal Reserve and Other Central Bank Deposits as presented on the consolidated balance sheets on page 31.
- (5) Rate calculations are based on actual balances rather than the rounded amounts presented in the Average Consolidated Balance Sheets with Analysis of Net Interest Income.

Notes: Net Interest Income (FTE Adjusted), a non-generally accepted accounting principle (GAAP) financial measure, includes adjustments to a fully taxable equivalent basis for loans and securities. Such adjustments are based on a blended federal and state tax rate of 37.8% and 37.6% for the three months ended September 30, 2016 and 2015, respectively. Total taxable equivalent interest adjustments amounted to \$7.0 million and \$6.1 million for the three months ended September 30, 2016 and 2015, respectively. A reconciliation of net interest income and net interest margin on a GAAP basis to net interest income and net interest margin on an FTE basis (each of which is a non-GAAP financial measure) is provided on page 28.

Interest revenue on cash collateral positions is reported above within interest-bearing deposits with banks and within loans and leases. Interest expense on cash collateral positions is reported above within non-U.S. offices interest-bearing deposits. Related cash collateral received from and deposited with derivative counterparties is recorded net of the associated derivative contract within other assets and other liabilities, respectively.

Net interest income is defined as the total of interest income and amortized fees on earning assets, less interest expense on deposits and borrowed funds, adjusted for the impact of interest-related hedging activity.

Net interest income on a fully taxable equivalent (FTE) basis totaled \$310.1 million, up \$35.1 million, or 13%, compared to \$275.0 million in the prior-year quarter. The increase was primarily the result of a higher net interest margin and growth in average earning assets. Average earning assets for the current quarter averaged \$107.8 billion, up \$7.0 billion, or 7%, from \$100.8 billion in the prior-year quarter, primarily resulting from higher levels of securities. Earning asset growth was funded primarily by a higher level of borrowed funds and interest-bearing and demand deposits.

The net interest margin on an FTE basis increased to 1.14% in the current quarter from 1.08% in the prior-year quarter due to higher yields on earning assets driven by the higher interest rate environment, partially offset by higher premium amortization.

When adjusted to an FTE basis, yields on taxable, nontaxable, and partially taxable assets are comparable; however, the adjustment to an FTE basis has no impact on net income. A reconciliation of net interest income and net interest margin on a GAAP basis to net interest income and net interest margin on an FTE basis (each of which is a non-GAAP financial measure) is provided on page 28.

Federal Reserve and other central bank deposits averaged \$20.8 billion, up \$3.5 billion, or 20%, from \$17.3 billion in the prior-year quarter. Average securities were \$43.3 billion, up \$5.3 billion, or 14%, from \$38.0 billion in the prior-year quarter and include certain community development investments, Federal Home Loan Bank stock, and Federal Reserve stock of \$180.0 million, \$179.6 million and \$53.1 million, respectively, which are recorded in other assets in the consolidated balance sheets.

Loans and leases averaged \$33.9 billion, up \$771.8 million, or 2%, from \$33.1 billion in the prior-year quarter, primarily reflecting higher levels of private client loans, commercial and institutional loans, and commercial real estate loans, partially offset by reductions in residential real estate loans. Private client loans averaged \$9.9 billion, up \$1.5 billion, or 18%, from \$8.4 billion for the prior-year quarter. Commercial and institutional loans averaged \$10.0 billion, up \$845.9 million, or 9%, from \$9.2 billion for the prior-year quarter. Commercial real estate loans averaged \$4.0 billion, up \$294.9 million, or 8%, from \$3.7 billion for the prior-year quarter. Residential real estate loans averaged \$8.3 billion, down \$934.6 million, or 10%, from \$9.2 billion for the prior-year quarter.

### THIRD QUARTER CONSOLIDATED RESULTS OF OPERATIONS (continued)

#### Net Interest Income (continued)

Northern Trust utilizes a diverse mix of funding sources. Total interest-bearing deposits averaged \$67.9 billion, compared to \$66.8 billion in the prior-year quarter, an increase of \$1.1 billion. Other interest-bearing funds averaged \$10.1 billion, an increase of \$3.1 billion, from \$7.0 billion in the prior-year quarter, primarily attributable to increased short-term borrowings. The balances within short-term borrowing classifications vary based on funding requirements and strategies, interest rate levels, changes in the volume of lower-cost deposit sources, and the availability of collateral to secure these borrowings. Average net noninterest-related funds utilized to fund earning assets increased \$2.7 billion, or 10%, to \$29.8 billion from \$27.0 billion in the prior-year quarter, primarily resulting from higher levels of demand and other noninterest-bearing deposits.

#### Provision for Credit Losses

The provision for credit losses was a credit of \$3.0 million in the current quarter, as compared to a credit provision of \$10.0 million in the prior-year quarter. Net recoveries in the current quarter were \$0.8 million, resulting from charge-offs of \$3.0 million and recoveries of \$3.8 million. The prior-year quarter included \$9.4 million of net charge-offs, resulting from \$11.9 million of charge-offs and \$2.5 million of recoveries. Nonperforming assets of \$181.0 million decreased 13% from the prior-year quarter. Residential real estate loans and commercial loans accounted for 57% and 35%, respectively, of total nonperforming loans and leases at September 30, 2016. For additional discussion of the provision and allowance for credit losses, refer to the “Asset Quality” section beginning on page 22.

#### Noninterest Expense

The components of noninterest expense are provided below.

**Table 10: Noninterest Expense**

<u>Noninterest Expense</u> (\$ In Millions)	Three Months Ended September 30,		Change	
	2016	2015		
Compensation	\$ 382.1	\$ 361.6	\$ 20.5	6%
Employee Benefits	73.2	69.8	3.4	5
Outside Services	157.6	158.3	(0.7)	—
Equipment and Software	114.5	113.6	0.9	1
Occupancy	44.2	43.7	0.5	1
Other Operating Expense	71.4	65.3	6.1	9
Total Noninterest Expense	\$ 843.0	\$ 812.3	\$ 30.7	4%

Compensation expense, the largest component of noninterest expense, totaled \$382.1 million in the current quarter, compared to \$361.6 million in the prior-year quarter. Compensation expense increased compared to the prior-year quarter, primarily reflecting higher staff levels and increased performance-based incentive compensation. Staff on a full-time equivalent basis at September 30, 2016 totaled approximately 16,900, up 6% from September 30, 2015.

Employee benefits expense totaled \$73.2 million in the current quarter, compared to \$69.8 million in the prior-year quarter. Employee benefits expense increased 5% compared to the prior-year quarter, primarily reflecting higher medical expense, partially offset by lower pension expense.

### THIRD QUARTER CONSOLIDATED RESULTS OF OPERATIONS (continued)

#### Noninterest Expense (continued)

Other operating expense totaled \$71.4 million in the current quarter, up 9% from \$65.3 million in the prior-year quarter, reflecting a \$3.5 million charge in connection with the settlement of certain securities lending litigation as well as higher FDIC deposit protection expense. The components of other operating expense are provided below.

**Table 11: Other Operating Expense**

<u>Other Operating Expense</u> (\$ In Millions)	Three Months Ended September 30,		Change	
	2016	2015		
Business Promotion	\$ 19.2	\$ 20.4	\$ (1.2)	(6)%
Staff Related	11.5	8.9	2.6	29
FDIC Insurance Premiums	9.5	6.6	2.9	42
Other Intangibles Amortization	2.0	2.1	(0.1)	(8)
Other Expenses	29.2	27.3	1.9	8
Total Other Operating Expense	\$ 71.4	\$ 65.3	\$ 6.1	9 %

#### Provision for Income Taxes

Income tax expense was \$116.1 million in the current quarter, representing an effective tax rate of 31.1%, compared to \$118.6 million in the prior-year quarter, representing an effective tax rate of 33.6%. The decrease in the provision for income taxes compared to the prior-year quarter was based on a lower effective tax rate driven by changes in the earnings mix in tax jurisdictions in which the Corporation operates, partially offset by increased income before income taxes. In addition, the provision for income tax expense for the three months ended September 30, 2016 includes a \$6.4 million benefit related to excess tax benefits recognized in the provision for income taxes rather than additional paid-in capital as a result of the Corporation's early adoption of ASU No. 2016-09.

#### REPORTING SEGMENTS

Northern Trust is organized around its two client-focused reporting segments: C&IS and Wealth Management. Asset management and related services are provided to C&IS and Wealth Management clients primarily by the Asset Management business. The revenue and expenses of Asset Management and certain other support functions are allocated fully to C&IS and Wealth Management. Income and expense associated with the wholesale funding activities and investment portfolios of the Corporation and its principal subsidiary, The Northern Trust Company (the Bank), as well as certain corporate-based expense, executive level compensation and nonrecurring items, are not allocated to C&IS and Wealth Management, and are reported in Northern Trust's third reporting segment, Treasury and Other, in the following pages.

## REPORTING SEGMENTS (continued)

The following tables reflect the earnings contributions and average assets of Northern Trust's reporting segments for the three- and nine- month periods ended September 30, 2016 and 2015. Reporting segment financial information, presented on an internal management-reporting basis, is determined by accounting systems that are used to allocate revenue and expense related to each segment and incorporates processes for allocating assets, liabilities, equity and the applicable interest income and expense.

**Table 12: Results of Reporting Segments**

<b>Three Months Ended September 30,</b> (\$ In Millions)	Corporate & Institutional Services		Wealth Management		Treasury and Other		Total Consolidated	
	2016	2015	2016	2015	2016	2015	2016	2015
Noninterest Income								
Trust, Investment and Other Servicing Fees	\$ 450.8	\$ 429.7	\$ 337.5	\$ 319.4	\$ —	\$ —	\$ 788.3	\$ 749.1
Foreign Exchange Trading Income	55.2	60.0	0.9	2.9	(2.5)	—	53.6	62.9
Other Noninterest Income	41.5	45.9	26.3	28.3	0.9	0.4	68.7	74.6
Net Interest Income*	138.2	108.6	164.1	142.5	7.8	23.9	310.1	275.0
Revenue*	685.7	644.2	528.8	493.1	6.2	24.3	1,220.7	1,161.6
Provision for Credit Losses	4.0	(2.8)	(7.0)	(7.2)	—	—	(3.0)	(10.0)
Noninterest Expense	487.8	464.6	318.0	316.3	37.2	31.4	843.0	812.3
Income before Income Taxes*	193.9	182.4	217.8	184.0	(31.0)	(7.1)	380.7	359.3
Provision for Income Taxes*	61.8	58.3	82.3	69.0	(21.0)	(2.6)	123.1	124.7
<b>Net Income</b>	<b>\$ 132.1</b>	<b>\$ 124.1</b>	<b>\$ 135.5</b>	<b>\$ 115.0</b>	<b>\$ (10.0)</b>	<b>\$ (4.5)</b>	<b>\$ 257.6</b>	<b>\$ 234.6</b>
Percentage of Consolidated Net Income	51%	53%	53%	49%	(4)%	(2)%	100%	100%
Average Assets	\$ 75,696.5	\$ 74,222.5	\$ 26,601.7	\$ 25,201.2	\$ 14,084.3	\$ 10,500.4	\$ 116,382.5	\$ 109,924.1

\* Non-GAAP financial measures stated on a fully taxable equivalent basis (FTE). Total consolidated includes FTE adjustments of \$7.0 million for 2016 and \$6.1 million for 2015. A reconciliation of revenue, net interest income and net interest margin on a GAAP basis to revenue, net interest income and net interest margin on an FTE basis (each of which is a non-GAAP financial measure) is provided on page 28.

<b>Nine Months Ended September 30,</b> (\$ In Millions)	Corporate & Institutional Services		Wealth Management		Treasury and Other		Total Consolidated	
	2016	2015	2016	2015	2016 <sup>^</sup>	2015	2016 <sup>^</sup>	2015
Noninterest Income								
Trust, Investment and Other Servicing Fees	\$ 1,331.1	\$ 1,269.0	\$ 982.6	\$ 964.4	\$ —	\$ —	\$ 2,313.7	\$ 2,233.4
Foreign Exchange Trading Income	169.1	199.3	7.0	10.0	2.4	—	178.5	209.3
Other Noninterest Income	113.0	131.0	79.8	83.9	124.8	107.6	317.6	322.5
Net Interest Income*	417.8	297.3	482.8	421.8	30.1	80.3	930.7	799.4
Revenue*	2,031.0	1,896.6	1,552.2	1,480.1	157.3	187.9	3,740.5	3,564.6
Provision for Credit Losses	—	(3.0)	(4.0)	(21.5)	—	—	(4.0)	(24.5)
Noninterest Expense	1,519.9	1,387.7	975.2	960.9	101.7	107.2	2,596.8	2,455.8
Income before Income Taxes*	511.1	511.9	581.0	540.7	55.6	80.7	1,147.7	1,133.3
Provision for Income Taxes*	158.0	160.9	219.1	203.2	4.6	34.7	381.7	398.8
<b>Net Income</b>	<b>\$ 353.1</b>	<b>\$ 351.0</b>	<b>\$ 361.9</b>	<b>\$ 337.5</b>	<b>\$ 51.0</b>	<b>\$ 46.0</b>	<b>\$ 766.0</b>	<b>\$ 734.5</b>
Percentage of Consolidated Net Income	46%	48%	47%	46%	7%	6%	100%	100%
Average Assets	\$ 75,589.0	\$ 73,089.3	\$ 26,525.6	\$ 24,732.4	\$ 12,795.3	\$ 11,896.6	\$ 114,909.9	\$ 109,718.3

\* Non-GAAP financial measures stated on a fully taxable equivalent basis (FTE). Total consolidated includes FTE adjustments of \$20.1 million for 2016 and \$18.7 million for 2015. A reconciliation of revenue, net interest income and net interest margin on a GAAP basis to revenue, net interest income and net interest margin on an FTE basis (each of which is a non-GAAP financial measure) is provided on page 28.

(<sup>^</sup>) The nine months ended September 30, 2016 results have been adjusted to reflect the early adoption of ASU No. 2016-09. Please refer to Note 2, "Recent Accounting Pronouncements," of the Notes to Consolidated Financial Statements for further discussion on the impact to the Corporation's previously reported quarterly results.

## REPORTING SEGMENTS (continued)

### Corporate & Institutional Services

C&IS net income totaled \$132.1 million in the current quarter compared to \$124.1 million in the prior-year quarter, an increase of \$8.0 million, or 6%. Noninterest income was \$547.5 million in the current quarter, up \$11.9 million, or 2%, from \$535.6 million in the prior-year quarter, reflecting higher trust, investment and other servicing fees, partially offset by lower foreign exchange trading income and other operating income. The following table provides a summary of C&IS trust, investment and other servicing fees.

**Table 13: C&IS Trust, Investment and Other Servicing Fees**

(\$ In Millions)	Three Months Ended September 30,		Change	
	2016	2015		
Custody and Fund Administration	\$ 299.4	\$ 293.9	\$ 5.5	2%
Investment Management	94.4	82.6	11.8	14
Securities Lending	23.1	19.8	3.3	17
Other	33.9	33.4	0.5	1
Total C&IS Trust, Investment and Other Servicing Fees	450.8	\$ 429.7	\$ 21.1	5%

Custody and fund administration fees, the largest component of C&IS fees, are driven primarily by values of client AUC/A, transaction volumes and number of accounts. The asset values used to calculate these fees vary depending on the individual fee arrangements negotiated with each client. Custody fees related to asset values are client specific and are priced based on quarter-end or month-end values, values at the beginning of each quarter or average values for a month or quarter. The fund administration fees that are asset-value-related are priced using month-end, quarter-end, or average daily balances. Investment management fees, which are based generally on client assets under management, are based primarily on market values throughout a period.

Custody and fund administration fees increased from the prior-year quarter, as new business was partially offset by the unfavorable impact of movements in foreign exchange rates and equity markets. Investment management fees increased \$11.8 million, or 14%, primarily due to lower money market mutual fund fee waivers. There were no C&IS money market mutual fund fee waivers in the current quarter compared to \$12.2 million in the prior-year quarter. Securities lending fees increased primarily reflecting higher spreads in the current quarter.

Foreign exchange trading income totaled \$55.2 million in the current quarter, a decrease of \$4.8 million, or 8%, from \$60.0 million in the prior-year quarter. The decrease generally reflected lower client volumes as compared to the prior-year quarter.

Other noninterest income in C&IS totaled \$41.5 million in the current quarter, down \$4.4 million, or 10%, from \$45.9 million in the prior-year quarter, primarily reflecting impairment charges and loss on sales related to a non-strategic loan and lease portfolio.

For the prior-year quarter, the presentation of average assets was changed to reflect a modification to the methodology by which assets are allocated among our reporting segments. For C&IS, this change in presentation resulted in an increase to average assets and a reduction in the net interest margin.

Net interest income stated on an FTE basis was \$138.2 million in the current quarter, up \$29.6 million, or 27%, from \$108.6 million in the prior-year quarter. The increase in net interest income was primarily attributable to an increase in the net interest margin to 0.79% from 0.64% in the prior-year quarter, primarily reflecting higher yields on earning assets. The average earning assets totaled \$69.2 billion, up from \$67.0 billion in the prior-year quarter. The earning assets in C&IS consisted primarily of intercompany assets and loans and leases. Funding sources were primarily comprised of non-U.S. custody-related interest-bearing deposits, which averaged \$45.2 billion in the current quarter, down slightly from \$45.7 billion in the prior-year quarter.

The provision for credit losses was a provision of \$4.0 million in the current quarter, compared with a credit provision of \$2.8 million in the prior-year quarter, reflecting a specific reserve requirement, partially offset by continued improvement in credit quality.

Total C&IS noninterest expense, which includes the direct expense of the reporting segment, indirect expense allocations for product and operating support and indirect expense allocations for certain corporate support services, totaled \$487.8 million in the current quarter, up \$23.2 million, or 5%, from \$464.6 million in the prior-year quarter. The increase in noninterest expense

## REPORTING SEGMENTS (continued)

### Corporate & Institutional Services (continued)

was primarily attributable to higher compensation expense, indirect expense allocations, and employee benefits, partially offset by lower outside services.

### Wealth Management

Wealth Management net income was \$135.5 million in the current quarter, up 18% from \$115.0 million in the prior-year quarter. Noninterest income was \$364.7 million, up from \$350.6 million in the prior-year quarter, primarily reflecting higher trust, investment and other servicing fees, partially offset by lower foreign exchange trading income and other noninterest income. Trust, investment and other servicing fees in Wealth Management totaled \$337.5 million in the current quarter, increasing \$18.1 million, or 6%, from \$319.4 million in the prior-year quarter. The following table provides a summary of Wealth Management trust, investment and other servicing fees.

**Table 14: Wealth Management Trust, Investment and Other Servicing Fees**

(\$ In Millions)	Three Months Ended September 30,		Change	
	2016	2015		
Central	\$ 135.6	\$ 126.8	\$ 8.8	7%
East	85.1	82.1	3.0	4
West	68.0	66.8	1.2	2
Global Family Office	48.8	43.7	5.1	12
Total Wealth Management Trust, Investment and Other Servicing Fees	\$ 337.5	\$ 319.4	\$ 18.1	6%

Wealth Management fee income is calculated primarily based on market values. The increase in Wealth Management fees across all regions was primarily attributable to lower money market mutual fund fee waivers and favorable equity markets. Money market mutual fund fee waivers in Wealth Management totaled \$0.2 million in the current quarter compared to \$15.3 million in the prior-year quarter.

Foreign exchange trading income totaled \$0.9 million, down 69% from \$2.9 million in the prior-year quarter, primarily reflecting decreased client activity.

Other noninterest income of \$26.3 million in the current quarter was down from \$28.3 million in the prior-year quarter, primarily reflecting a decrease in security commission and trading income.

For the prior-year quarter, the presentation of average assets was changed to reflect a modification to the methodology by which assets are allocated among our reporting segments. This change in presentation did not have a significant impact on the Wealth Management reporting segment.

Net interest income stated on an FTE basis was \$164.1 million in the current quarter, up \$21.6 million, or 15%, from \$142.5 million in the prior-year quarter, primarily reflecting an increase in the net interest margin and higher levels of average earning assets. The net interest margin increased to 2.47% from 2.26% in the prior-year quarter. Average earning assets increased \$1.4 billion, or 5%, to \$26.4 billion from the prior-year quarter's \$25.0 billion. Earning assets and funding sources were primarily comprised of loans and domestic retail interest-bearing deposits, respectively.

The provision for credit losses was a credit provision of \$7.0 million in the current quarter, compared with a credit provision of \$7.2 million in the prior-year quarter, which reflected continued improvement in credit quality.

Total noninterest expense, which includes the direct expense of the reporting segment, indirect expense allocations for product and operating support and indirect expense allocations for certain corporate support services, totaled \$318.0 million in the current quarter, compared to \$316.3 million in the prior-year quarter, an increase of \$1.7 million, or 1%, primarily attributable to higher compensation expense and indirect expense allocations, partially offset by other operating expense.

## REPORTING SEGMENTS (continued)

### Treasury and Other

Treasury and Other includes income and expense associated with the wholesale funding activities and the investment portfolios of the Corporation and the Bank, and certain corporate-based expenses, executive-level compensation and nonrecurring items not allocated to C&IS and Wealth Management.

Treasury and Other noninterest income was negative \$1.6 million in the current quarter, down \$2.0 million from \$0.4 million in the prior-year quarter, primarily due to lower foreign exchange trading income.

For the prior-year quarter, the presentation of average assets was changed to reflect a modification to the methodology by which assets are allocated among our reporting segments. For Treasury and Other, this change in presentation resulted in a decrease to average assets and an increase in the net interest margin.

Net interest income decreased \$16.1 million, or 67%, to \$7.8 million in the current quarter, compared to \$23.9 million in the prior-year quarter. The decrease reflected a decline in the net interest margin, partially offset by higher levels of earning assets. Average earning assets increased \$3.4 billion to \$12.3 billion from the prior-year quarter's \$8.8 billion.

Noninterest expense totaled \$37.2 million in the current quarter, up \$5.8 million, or 18%, from \$31.4 million in the prior-year quarter, primarily reflecting higher general overhead costs, including compensation expense and outside services, partially offset by lower indirect expense allocations to C&IS and Wealth Management, as compared to the prior-year quarter.

## NINE-MONTH CONSOLIDATED RESULTS OF OPERATIONS

### Overview

The Corporation early adopted ASU No. 2016-09 on July 1, 2016, with an effective date of January 1, 2016, which resulted in a reclassification of \$5.9 million from additional paid-in capital to provision for income taxes, representing excess tax benefits previously recognized in additional paid-in capital during the six months ended June 30, 2016. During the three months ended September 30, 2016, the Corporation recognized a benefit of \$6.4 million in provision for income taxes for excess tax benefits that occurred in the current quarter. The early adoption favorably impacted net income per diluted common share by \$0.06 per share for the nine months ended September 30, 2016, respectively.

Net income per diluted common share was \$3.21 for the nine months ended September 30, 2016, and \$3.00 in the comparable prior-year period. Net income totaled \$766.0 million, up slightly as compared to \$734.5 million in the prior-year period. The performance in the current period produced an annualized return on average common equity of 11.9%, compared to 11.7% in the prior-year period. The annualized return on average assets was 0.9% in both the current and prior-year periods.

The three months ended June 30, 2016 included a gain on the sale of 1.1 million Visa Inc. Class B common shares, net of the valuation adjustment to existing swap agreements, totaling \$118.2 million; a charge in connection with an agreement to settle certain securities lending litigation of \$46.5 million; charges related to contractual modifications associated with existing C&IS clients of \$18.6 million; severance, other personnel and related charges of \$17.5 million; impairment charges and the loss on sale related to the decision to exit a portion of a non-strategic loan and lease portfolio of \$14.1 million; and impairment charges related to the residual value of certain aircraft and rail cars of \$7.5 million. Excluding these items, net income per diluted common share, net income and return on average common equity during the nine months ended September 30, 2016 were \$3.17, \$758.0 million and 11.7%, respectively.

The prior period included a net gain on the sale of 1.0 million Visa Inc. Class B common shares totaling \$99.9 million; voluntary cash contributions to certain constant dollar NAV funds of \$45.8 million; and the impairment of the residual value of certain aircraft under leveraged lease agreements of \$17.8 million. Excluding the gain and charges, net income per diluted common share, net income, and return on average common equity were \$2.91, \$712.1 million and 11.3%, respectively.

Revenue for the nine months ended September 30, 2016 totaled \$3.72 billion, up \$174.5 million, or 5%, as compared to \$3.55 billion in the prior-year period, primarily driven by increased net interest income and trust, investment and other servicing fees, partially offset by lower foreign exchange trading income. Noninterest income was \$2.81 billion, up \$44.6 million, or 2%, from \$2.77 billion in the prior-year period.

Net interest income increased 17% to \$910.6 million in the current period as compared to \$780.7 million in the prior-year period, due to a higher net interest margin and growth in earning assets. Additionally, the three months ended June 30, 2016 included a



## NINE-MONTH CONSOLIDATED RESULTS OF OPERATIONS (continued)

### Overview (continued)

charge of \$2.7 million related to the residual value of certain aircraft and rail cars. The prior-year period included a charge of \$17.8 million related to the residual value of certain aircraft under leveraged lease agreements.

The provision for credit losses was a credit of \$4.0 million in the current period, as compared to a credit provision of \$24.5 million in the prior-year period.

Noninterest expense totaled \$2.6 billion, up \$141.0 million, or 6%, from \$2.5 billion in the prior-year period. The three months ended June 30, 2016 included charges in connection with an agreement to settle certain securities lending litigation of \$46.5 million; charges related to contractual modifications associated with existing C&IS clients of \$18.6 million; and severance, other personnel and related charges of \$17.5 million. The prior-year quarter included the \$45.8 million charge related to voluntary cash contributions to certain constant dollar NAV funds. Excluding the current- and prior-year period charges, noninterest expense increased \$104.2 million, or 4%, primarily attributable to higher compensation, outside services expense, and a charge in connection with the settlement of the one remaining securities lending litigation claim related to the 2008 financial crisis.

### Noninterest Income

The components of noninterest income are provided below.

**Table 15: Nine Months Ended September 30 Noninterest Income**

<u>Noninterest Income</u> (\$ In Millions)	Nine Months Ended September 30,		Change	
	2016	2015		
Trust, Investment and Other Servicing Fees	\$ 2,313.7	\$ 2,233.4	\$ 80.3	4%
Foreign Exchange Trading Income	178.5	209.3	(30.8)	(15)
Treasury Management Fees	47.2	48.5	(1.3)	(3)
Security Commissions and Trading Income	59.9	60.2	(0.3)	—
Other Operating Income	212.4	214.1	(1.7)	(1)
Investment Security Gains (Losses), net	(1.9)	(0.3)	(1.6)	N/M
Total Noninterest Income	\$ 2,809.8	\$ 2,765.2	\$ 44.6	2%

As illustrated in the following table, trust, investment and other servicing fees from C&IS increased \$62.1 million, or 5%, totaling \$1.33 billion, compared to \$1.27 billion a year ago.

**Table 16: Nine Months Ended September 30 C&IS Trust, Investment and Other Servicing Fees**

<u>C&amp;IS Trust, Investment and Other Servicing Fees</u> (\$ In Millions)	Nine Months Ended September 30,		Change	
	2016	2015		
Custody and Fund Administration	\$ 879.1	\$ 864.6	\$ 14.5	2%
Investment Management	277.7	239.6	38.1	16
Securities Lending	72.5	68.2	4.3	6
Other	101.8	96.6	5.2	5
Total	\$ 1,331.1	\$ 1,269.0	\$ 62.1	5%

Custody and fund administration fees, the largest component of C&IS fees, increased 2%, primarily driven by new business, partially offset by the unfavorable impact of equity markets and movements in foreign exchange rates. C&IS investment management fees increased 16%, primarily due to lower money market mutual fund fee waivers. Money market mutual fund fee waivers in C&IS totaled \$1.9 million, compared to waived fees of \$41.0 million in the prior-year period. Other fees in C&IS increased 5%, primarily due to new business related to investment risk and analytical services and increased other ancillary services.

## NINE-MONTH CONSOLIDATED RESULTS OF OPERATIONS (continued)

### Noninterest Income (continued)

As illustrated in the following table, trust, investment and other servicing fees from Wealth Management totaled \$982.6 million, up from \$964.4 million a year ago.

**Table 17: Nine Months Ended September 30 Wealth Management Trust, Investment and Other Servicing Fees**

(\$ In Millions)	Nine Months Ended September 30,		Change	
	2016	2015		
<b>Wealth Management Trust, Investment and Other Servicing Fees</b>				
Central	\$ 390.2	\$ 385.8	\$ 4.4	1%
East	250.6	250.4	0.2	—
West	199.4	202.1	(2.7)	(1)
Global Family Office	142.4	126.1	16.3	13
Total	\$ 982.6	\$ 964.4	\$ 18.2	2%

The net increase in Wealth Management fees, driven by Global Family Office, was primarily attributable to lower money market mutual fund fee waivers in the current period. Money market mutual fund fee waivers in Wealth Management totaled \$6.2 million compared with \$47.6 million in the prior-year period.

Foreign exchange trading income decreased \$30.8 million, or 15%, and totaled \$178.5 million compared with \$209.3 million in the prior-year period. The decrease was attributable to lower client volumes compared to the prior-year period.

Other operating income decreased 1% to \$212.4 million compared with \$214.1 million in the prior-year period. The components of other operating income are provided below.

**Table 18: Nine Months Ended September 30 Other Operating Income**

Other Operating Income (\$ In Millions)	Nine Months Ended September 30,		Change	
	2016	2015		
Loan Service Fees	\$ 42.2	\$ 44.3	\$ (2.1)	(5)%
Banking Service Fees	38.8	35.6	3.2	9 %
Other Income	131.4	134.2	(2.8)	(2)
Total Other Operating Income	\$ 212.4	\$ 214.1	\$ (1.7)	(1)%

The current-year period other income included the gain on the sale of 1.1 million Visa Inc. Class B common shares, net of the valuation adjustment to existing swap agreements, totaling \$118.2 million, offset by impairment charges and the loss on sale related to the decision to exit a portion of a non-strategic loan and lease portfolio as well as impairment charges related to the residual value of certain aircraft and rail cars of \$18.9 million in the three months ended June 30, 2016. The prior-year period other income included a \$99.9 million net gain on the sale of a portion of the Visa Inc. Class B common shares held by the Corporation. Excluding these items, other operating income decreased 1% from the prior-year period, primarily due to impairment charges and loss on sales related to a non-strategic loan and lease portfolio, partially offset by income associated with supplemental compensation plans.

## NINE-MONTH CONSOLIDATED RESULTS OF OPERATIONS (continued)

### Net Interest Income

The following table presents an analysis of average balances and interest rate changes affecting net interest income.

**Table 19: Nine Months Ended September 30 Average Consolidated Balance Sheets with Analysis of Net Interest Income**

NORTHERN TRUST CORPORATION						
Nine Months Ended September 30,						
(Interest and Rate on a Fully Taxable Equivalent Basis)	2016		2015			
(\$ In Millions)	Interest	Average Balance	Rate <sup>(5)</sup>	Interest	Average Balance	Rate <sup>(5)</sup>
<b>Average Earning Assets</b>						
Federal Funds Sold and Securities Purchased under						
Agreements to Resell	\$ 12.4	\$ 1,707.0	0.97%	\$ 3.7	\$ 1,052.2	0.47%
Interest-Bearing Due from and Deposits with Banks <sup>(1)</sup>	49.4	9,036.0	0.73	64.9	11,057.5	0.78
Federal Reserve and Other Central Bank Deposits	71.4	20,553.5	0.46	44.2	19,014.5	0.31
Securities						
U.S. Government	62.6	6,890.8	1.21	40.2	4,802.9	1.12
Obligations of States and Political Subdivisions	7.5	465.6	2.16	5.7	112.3	6.77
Government Sponsored Agency	123.9	17,232.9	0.96	106.6	16,509.5	0.86
Other <sup>(2)</sup>	128.5	16,358.8	1.05	100.6	15,838.1	0.85
Total Securities	322.5	40,948.1	1.05	253.1	37,262.8	0.91
Loans and Leases <sup>(3)</sup>	610.3	34,119.1	2.39	546.1	32,723.6	2.23
<b>Total Earning Assets</b>	<b>1,066.0</b>	<b>106,363.7</b>	<b>1.34</b>	<b>912.0</b>	<b>101,110.5</b>	<b>1.21</b>
Allowance for Credit Losses Assigned to Loans and Leases	—	(193.9)	—	—	(260.6)	—
Cash and Due from Banks and Other Central Bank Deposits <sup>(4)</sup>	—	2,072.9	—	—	2,137.3	—
Buildings and Equipment	—	442.4	—	—	443.0	—
Client Security Settlement Receivables	—	1,178.2	—	—	979.1	—
Goodwill	—	526.6	—	—	531.1	—
Other Assets	—	4,520.0	—	—	4,777.9	—
<b>Total Assets</b>	<b>\$ —</b>	<b>\$ 114,909.9</b>	<b>—%</b>	<b>\$ —</b>	<b>\$ 109,718.3</b>	<b>—%</b>
<b>Average Source of Funds</b>						
Deposits						
Savings and Money Market	\$ 8.7	\$ 15,144.3	0.08%	\$ 7.3	\$ 15,410.9	0.06%
Savings Certificates and Other Time	5.9	1,438.4	0.55	5.5	1,668.5	0.44
Non-U.S. Offices — Interest-Bearing	48.8	50,452.8	0.13	40.2	48,943.0	0.11
Total Interest-Bearing Deposits	63.4	67,035.5	0.13	53.0	66,022.4	0.11
Short-Term Borrowings	14.9	6,249.3	0.32	3.9	4,485.5	0.12
Senior Notes	35.2	1,496.6	3.14	35.2	1,497.1	3.14
Long-Term Debt	19.3	1,403.1	1.83	18.8	1,441.4	1.75
Floating Rate Capital Debt	2.5	277.4	1.20	1.7	277.3	0.84
<b>Total Interest-Related Funds</b>	<b>135.3</b>	<b>76,461.9</b>	<b>0.24</b>	<b>112.6</b>	<b>73,723.7</b>	<b>0.20</b>
Interest Rate Spread	—	—	1.10	—	—	1.01
Demand and Other Noninterest-Bearing Deposits	—	26,252.4	—	—	23,956.8	—
Other Liabilities	—	3,289.6	—	—	3,439.9	—
Stockholders' Equity	—	8,906.0	—	—	8,597.9	—
<b>Total Liabilities and Stockholders' Equity</b>	<b>\$ —</b>	<b>\$ 114,909.9</b>	<b>—%</b>	<b>\$ —</b>	<b>\$ 109,718.3</b>	<b>—%</b>
<b>Net Interest Income/Margin (FTE Adjusted)</b>	<b>\$ 930.7</b>	<b>\$ —</b>	<b>1.17%</b>	<b>\$ 799.4</b>	<b>\$ —</b>	<b>1.06%</b>
<b>Net Interest Income/Margin (Unadjusted)</b>	<b>\$ 910.6</b>	<b>\$ —</b>	<b>1.14%</b>	<b>\$ 780.7</b>	<b>\$ —</b>	<b>1.03%</b>

## NINE-MONTH CONSOLIDATED RESULTS OF OPERATIONS (continued)

### Net Interest Income (continued)

#### ANALYSIS OF NET INTEREST INCOME CHANGES DUE TO VOLUME AND RATE

(In Millions)	Nine Months Ended September 30, 2016/2015		
	Change Due To		
	Average Balance	Rate	Total
Earning Assets (FTE)	\$ 50.2	\$ 103.8	\$ 154.0
Interest-Related Funds	3.6	19.1	22.7
Net Interest Income (FTE)	\$ 46.6	\$ 84.7	\$ 131.3

- (1) Interest-Bearing Due from and Deposits with Banks includes the interest-bearing component of Cash and Due from Banks and Interest-Bearing Deposits with Banks as presented on the consolidated balance sheets in our periodic filings with the U.S. Securities and Exchange Commission.
- (2) Other securities include certain community development investments and Federal Home Loan Bank and Federal Reserve stock of \$179.0 million, \$191.7 million and \$53.1 million, which are classified in other assets in the consolidated balance sheets as of September 30, 2016 and 2015.
- (3) Average balances include nonaccrual loans. Lease financing receivable balances are reduced by deferred income.
- (4) Cash and Due from Banks and Other Central Bank Deposits includes the non-interest-bearing component of Federal Reserve and Other Central Bank Deposits as presented on the consolidated balance sheets on page 31.
- (5) Rate calculations are based on actual balances rather than the rounded amounts presented in the Average Consolidated Balance Sheets with Analysis of Net Interest Income.

Notes: Net Interest Income (FTE Adjusted), a non-generally accepted accounting principle (GAAP) financial measure, includes adjustments to a fully taxable equivalent basis for loans and securities. Such adjustments are based on a blended federal and state tax rate of 37.8% and 37.6% for the nine months ended September 30, 2016 and 2015, respectively. Total taxable equivalent interest adjustments amounted to \$20.1 million and \$18.7 million for the nine months ended September 30, 2016 and 2015, respectively. A reconciliation of net interest income and net interest margin on a GAAP basis to net interest income and net interest margin on an FTE basis (each of which is a non-GAAP financial measure) is provided on page 28.

Interest revenue on cash collateral positions is reported above within interest-bearing deposits with banks and within loans and leases. Interest expense on cash collateral positions is reported above within non-U.S. offices interest-bearing deposits. Related cash collateral received from and deposited with derivative counterparties is recorded net of the associated derivative contract within other assets and other liabilities, respectively.

Net interest income, stated on an FTE basis, totaled \$930.7 million, an increase of \$131.3 million, or 16%, from \$799.4 million reported in the prior-year period. The increase is the result of growth in earning assets and a higher net interest margin. Additionally, the three months ended June 30, 2016 included a charge of \$2.7 million related to the residual value of certain aircraft and rail cars. The prior-year period included a charge of \$17.8 million related to the residual value of certain aircraft under leveraged lease agreements. Average earning assets were \$106.4 billion, up \$5.3 billion, or 5%, from \$101.1 billion in the prior-year period, primarily attributable to higher levels of securities and loans. The net interest margin, on an FTE basis, increased to 1.17% from 1.06% in the prior-year period. Excluding the impairments, the net interest margin was 1.17% and 1.08%, respectively, primarily reflecting higher yields on earning assets.

#### Provision for Credit Losses

The provision for credit losses was a credit of \$4.0 million in the current-year period, compared to a credit provision of \$24.5 million in the prior-year period. Net charge-offs in the current-year period totaled \$4.3 million resulting from \$13.2 million of charge-offs and \$8.9 million of recoveries, compared to net charge-offs of \$16.6 million in the prior-year period resulting from \$25.5 million of charge-offs and \$8.9 million of recoveries. The current period provision reflects improved credit quality. Residential real estate loans continued to reflect weakness relative to the overall portfolio, accounting for 57% and 77% of total nonperforming loans and leases at September 30, 2016 and 2015, respectively. Loan balances within the private client, commercial real estate and non-U.S. loan portfolios increased in the current period, while the residential real estate loan balance decreased. For a fuller discussion of the consolidated allowance and provision for credit losses refer to the "Asset Quality" section beginning on page 22.

## NINE-MONTH CONSOLIDATED RESULTS OF OPERATIONS (continued)

### Noninterest Expense

Noninterest expense totaled \$2.60 billion for the current period, up \$141.0 million, or 6%, compared to \$2.46 billion in the prior-year period. The components of noninterest expense are provided below.

**Table 20: Nine Months Ended September 30 Noninterest Expense**

<u>Noninterest Expense</u> (\$ In Millions)	Nine Months Ended September 30,		Change	
	2016	2015		
Compensation	\$ 1,150.4	\$ 1,077.8	\$ 72.6	7%
Employee Benefits	216.0	215.9	0.1	—
Outside Services	466.5	440.6	25.9	6
Equipment and Software	346.7	338.3	8.4	3
Occupancy	130.4	129.7	0.7	—
Other Operating Expense	286.8	253.5	33.3	13
Total Noninterest Expense	\$ 2,596.8	\$ 2,455.8	\$ 141.0	6%

Compensation expense, the largest component of noninterest expense increased to \$1.15 billion from the prior-year period's \$1.08 billion. Compensation expense in the current period included severance and related charges of \$13.0 million in the three months ended June 30, 2016. Excluding the severance and related charges, compensation expense increased \$59.6 million, or 6%, compared to the prior-year period, primarily reflecting higher salary expense and performance-based incentive compensation.

Employee benefits expense of \$216.0 million was relatively unchanged from \$215.9 million in the prior-year period. Employee benefits expense in the current period included severance and related charges of \$1.5 million in the three months ended June 30, 2016. Excluding the severance and related charges, employee benefits expense decreased 1% compared to the prior-year period, primarily reflecting a decrease in pension expense, partially offset by higher medical expense.

Outside services expense equaled \$466.5 million, up from \$440.6 million in the prior-year period. Expense for outside services in the current period included severance and related charges of \$0.7 million in the three months ended June 30, 2016. Excluding the severance and related charges, expense for outside services increased \$25.2 million, or 6%, compared to the prior-year period, primarily reflecting increased technical services and consulting services, partially offset by a reduction in third party advisory fees.

Equipment and software expense totaled \$346.7 million, up \$8.4 million, or 3% from \$338.3 million in the prior-year period, reflecting increased software amortization.

Occupancy expense equaled \$130.4 million, relatively unchanged from \$129.7 million in the prior-year period.

Other operating expense totaled \$286.8 million, up \$33.3 million, or 13%, from \$253.5 million in the prior-year period. The components of other operating expense are provided below.

**Table 21: Nine Months Ended September 30 Other Operating Expense**

<u>Other Operating Expense</u> (\$ In Millions)	Nine Months Ended September 30,		Change	
	2016	2015		
Business Promotion	\$ 67.2	\$ 69.5	\$ (2.3)	(3)%
Staff Related	33.3	28.0	5.3	19
FDIC Insurance Premiums	22.8	18.2	4.6	25
Other Intangibles Amortization	6.3	8.8	(2.5)	(29)
Other Expenses	157.2	129.0	28.2	22
Total Other Operating Expense	\$ 286.8	\$ 253.5	\$ 33.3	13

Other operating expense in the current period included a charge in connection with an agreement to settle certain securities lending litigation of \$46.5 million, charges related to contractual modifications associated with existing C&IS clients of \$18.6 million, and other personnel charges of \$2.3 million recorded in the three months ended June 30, 2016. The prior-year period included a charge related to voluntary cash contributions to certain constant dollar NAV funds totaling \$45.8 million. Excluding these charges,

## **NINE-MONTH CONSOLIDATED RESULTS OF OPERATIONS (continued)**

### **Noninterest Expense (continued)**

other operating expense was \$219.4 million, up \$11.7 million or 6%, compared to \$207.7 million in the prior-year period, primarily due to increases in various other expenses, including higher supplemental compensation plans expense and FDIC deposit protection expense.

### **Provision for Income Taxes**

Income tax expense was \$361.6 million for the nine months ended September 30, 2016, representing an effective tax rate of 32.1%. The provision for income taxes was \$380.1 million for the nine months ended September 30, 2015, representing an effective tax rate of 34.1%. The provision for income tax expense for the nine months ended September 30, 2016 includes a \$12.3 million benefit related to excess tax benefits recognized in the provision for income taxes rather than additional paid-in capital as a result of the Corporation's early adoption of ASU No. 2016-09.

## **CONSOLIDATED BALANCE SHEETS**

Total assets were \$120.1 billion and \$116.7 billion at September 30, 2016 and December 31, 2015, respectively, and averaged \$116.4 billion in the current quarter compared with \$109.9 billion in the quarter ended September 30, 2015. Average balances are considered to be a better measure of balance sheet trends, as period-end balances can be impacted by deposit and withdrawal activity involving large client balances. Loans and leases totaled \$33.4 billion and \$33.2 billion at September 30, 2016 and December 31, 2015, respectively, and averaged \$33.9 billion in the current quarter, up 2% from \$33.1 billion in the quarter ended September 30, 2015. Securities, inclusive of Federal Reserve stock, Federal Home Loan Bank stock, and certain community development investments, which are classified in other assets in the consolidated balance sheets, totaled \$45.0 billion and \$38.0 billion at September 30, 2016 and December 31, 2015, respectively, and averaged \$43.3 billion for the current quarter, up 14% from \$38.0 billion in the quarter ended September 30, 2015. In aggregate, the categories of federal funds sold and securities purchased under agreements to resell, interest-bearing due from and deposits with banks, and Federal Reserve and other central bank deposits totaled \$33.3 billion and \$35.7 billion at September 30, 2016 and December 31, 2015, respectively, and averaged \$30.7 billion in the current quarter, down 4% from the quarter ended September 30, 2015, primarily reflecting decreased interest-bearing due from and deposits with banks. Interest-bearing client deposits at September 30, 2016 and December 31, 2015, totaled \$70.3 billion and \$66.7 billion, respectively, and averaged \$67.9 billion in the current quarter compared to \$66.8 billion in the quarter ended September 30, 2015. Noninterest-bearing client deposits at September 30, 2016 and December 31, 2015 totaled \$29.2 billion and \$30.2 billion, respectively, and averaged \$25.8 billion in the current quarter, up 6% from \$24.3 billion in the quarter ended September 30, 2015.

Total stockholders' equity at September 30, 2016, was \$9.6 billion compared to \$8.7 billion at December 31, 2015, and averaged \$9.2 billion for the current quarter, up 6% from \$8.7 billion for the quarter ended September 30, 2015. The increase in average stockholders' equity compared to the prior-year quarter was primarily attributable to the issuance of Series D Non-Cumulative Perpetual Preferred Stock (Series D preferred stock) and earnings, partially offset by dividend declarations and the repurchase of common stock pursuant to the Corporation's share repurchase program.

During the three and nine months ended September 30, 2016, the Corporation declared cash dividends totaling \$87.8 million and \$255.1 million to common stockholders, and cash dividends totaling \$5.9 million and \$17.6 million to Series C preferred stockholders, respectively. During the three and nine months ended September 30, 2016, the Corporation repurchased 951,401 shares of common stock, including 42,012 shares withheld related to share-based compensation, at a total cost of \$64.9 million (\$68.26 average price per share) and 5,231,246 shares of common stock, including 429,855 shares withheld related to share-based compensation, at a total cost of \$346.1 million (\$66.15 average price per share), respectively.

## CAPITAL RATIOS

The capital ratios of Northern Trust and its principal subsidiary, The Northern Trust Company, remained strong at September 30, 2016, with all ratios applicable to classification as “well capitalized” under U.S. regulatory requirements having been exceeded.

The table below provides capital ratios for Northern Trust Corporation and The Northern Trust Company determined by Basel III phased in requirements.

**Table 22: Regulatory Capital Ratios**

	September 30, 2016		June 30, 2016		September 30, 2015	
	Advanced Approach	Standardized Approach	Advanced Approach	Standardized Approach	Advanced Approach	Standardized Approach
<b>Capital Ratios — Northern Trust Corporation</b>						
Common Equity Tier 1	11.8%	11.2%	11.5%	10.6%	12.4%	10.5%
Tier 1	13.1%	12.3%	12.0%	11.0%	13.0%	11.0%
Total	14.5%	14.0%	13.5%	12.7%	14.8%	12.8%
Tier 1 Leverage	7.9%	7.9%	7.4%	7.4%	7.8%	7.8%
Supplementary Leverage <sup>(1)</sup>	6.6%	N/A	6.2%	N/A	6.4%	N/A
<b>Capital Ratios — The Northern Trust Company</b>						
	September 30, 2016		June 30, 2016		September 30, 2015	
	Advanced Approach	Standardized Approach	Advanced Approach	Standardized Approach	Advanced Approach	Standardized Approach
Common Equity Tier 1	12.0%	11.1%	11.6%	10.4%	12.0%	9.9%
Tier 1	12.0%	11.1%	11.6%	10.4%	12.0%	9.9%
Total	13.6%	12.9%	13.3%	12.3%	13.6%	11.6%
Tier 1 Leverage	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
Supplementary Leverage <sup>(1)</sup>	5.9%	N/A	5.8%	N/A	5.7%	N/A

<sup>(1)</sup> Effective January 1, 2018, Northern Trust will be subject to a minimum supplementary leverage ratio of 3 percent.

## STATEMENTS OF CASH FLOWS

Net cash provided by operating activities of \$671.5 million for the nine months ended September 30, 2016, was primarily attributable to period earnings, partially offset by net collateral deposited with counterparties. For the nine months ended September 30, 2015, net cash provided by operating activities of \$483.8 million, was primarily attributable to period earnings, partially offset by other operating activities and net collateral deposited with counterparties.

Net cash used in investing activities of \$5.3 billion for the nine months ended September 30, 2016, was primarily attributable to net purchases of securities available for sale and held to maturity, partially offset by a reduction in interest bearing deposits with banks and federal reserve and other central bank deposits. For the nine months ended September 30, 2015, net cash used in investing activities of \$10.5 billion, was primarily attributable to net purchases of securities available for sale and held to maturity, as well as increased interest bearing deposits with banks, loans and leases, and client security settlement receivables.

Net cash provided by financing activities of \$2.8 billion for the nine months ended September 30, 2016, was primarily attributable to higher levels of total deposits and the issuance of the Series D preferred stock, partially offset by the repurchase of common stock pursuant to the Corporation’s share repurchase program and cash dividends paid to common stockholders. The increase in total deposits was attributable to higher levels of demand and other noninterest-bearing client deposits. For the nine months ended September 30, 2015, net cash provided by financing activities totaled \$11.6 billion, primarily reflecting increased levels of total deposits and increased short-term other borrowings, partially offset by lower securities sold under agreements to repurchase and the repurchase of common stock pursuant to the Corporation’s share repurchase program. The increase in total deposits was attributable to higher levels of interest-bearing and noninterest-bearing non-U.S. office client and demand and other noninterest-bearing client deposits.

## ASSET QUALITY

### Securities Portfolio

Northern Trust maintains a high quality securities portfolio, with 81% of the combined available for sale, held to maturity, and trading account portfolios at September 30, 2016, comprised of U.S. Treasury and government sponsored agency securities and triple-A rated corporate notes, asset-backed securities, covered bonds, sub-sovereign, supranational, sovereign and non-U.S. agency bonds, commercial mortgage-backed securities and obligations of states and political subdivisions. The remaining portfolio was comprised of corporate notes, asset-backed securities, negotiable certificates of deposit, obligations of states and political subdivisions, auction rate securities and other securities, of which as a percentage of the total securities portfolio, 9% was rated double-A, 3% was rated below double-A, and 7% was not rated by Standard and Poor's or Moody's Investors Service (primarily negotiable certificates of deposits of banks and non-U.S. sovereign securities whose long term ratings are at least A).

Net unrealized gains within the investment securities portfolio totaled \$118.9 million at September 30, 2016, comprised of \$193.0 million and \$74.1 million of gross unrealized gains and losses, respectively. Of the unrealized losses on securities at September 30, 2016, the largest component was \$30.5 million of unrealized losses in securities classified as "other," related to securities primarily purchased at a premium or par by Northern Trust for compliance with the Community Reinvestment Act (CRA). Unrealized losses on these CRA-related securities were attributable to yields that were below market rates for the purpose of supporting institutions and programs that benefit low- to moderate- income communities within Northern Trust's market area. Unrealized losses of \$22.9 million related to government sponsored agency securities were primarily attributable to changes in market rates since their purchase. Also, \$12.9 million of the unrealized losses related to corporate debt securities, primarily reflecting higher market rates, and wider credit spreads since purchase; as of September 30, 2016, 31% of the corporate debt portfolio was backed by guarantees provided by U.S. and non-U.S. governmental entities.

For the nine months ended September 30, 2016, charges of \$2.4 million were recorded relating to the other-than-temporary impairment (OTTI) of certain CRA eligible securities. There were no OTTI losses for the nine months ended September 30, 2015. Northern Trust has evaluated all securities with unrealized losses for possible OTTI in accordance with GAAP and Northern Trust's security impairment review policy.

Northern Trust participates in the repurchase agreement market as a relatively low cost alternative for short-term funding. Securities purchased under agreements to resell and securities sold under agreements to repurchase are accounted for as collateralized financings and recorded at the amounts at which the securities were acquired or sold plus accrued interest. To minimize potential credit risk associated with these transactions, the fair value of the securities purchased or sold is monitored, limits are set on exposure with counterparties, and the financial condition of counterparties is regularly assessed. It is Northern Trust's policy to take possession, either directly or via third-party custodians, of securities purchased under agreements to resell. Securities sold under agreements to repurchase are held by the counterparty until their repurchase.



## ASSET QUALITY (continued)

### Nonperforming Loans and Leases and Other Real Estate Owned

Nonperforming assets consist of nonperforming loans and leases and other real estate owned (OREO). OREO is comprised of commercial and residential properties acquired in partial or total satisfaction of loans.

The following table provides the amounts of nonperforming loans and leases, by loan and lease segment and class, and of OREO that were outstanding at the dates shown, as well as the balance of loans that was delinquent 90 days or more and still accruing interest. The balance of loans delinquent 90 days or more and still accruing interest can fluctuate widely based on the timing of cash collections, renegotiations and renewals.

**Table 23: Nonperforming Assets**

(\$ In Millions)	September 30, 2016	June 30, 2016	September 30, 2015
Nonperforming Loans and Leases			
Commercial			
Commercial and Institutional	\$ 61.3	\$ 38.5	\$ 20.3
Commercial Real Estate	11.8	12.2	25.2
Total Commercial	73.1	50.7	45.5
Personal			
Residential Real Estate	98.0	99.3	152.6
Private Client	2.2	2.2	0.5
Total Personal	100.2	101.5	153.1
Total Nonperforming Loans and Leases	173.3	152.2	198.6
Other Real Estate Owned	7.7	14.2	8.9
Total Nonperforming Assets	181.0	166.4	207.5
90 Day Past Due Loans Still Accruing	\$ 12.5	\$ 8.3	\$ 2.3
Nonperforming Loans and Leases to Total Loans and Leases	0.52%	0.44%	0.59%
Coverage of Loan and Lease Allowance to Nonperforming Loans and Leases	1.1x	1.3x	1.2x

Nonperforming assets of \$181.0 million as of September 30, 2016, reflected improved credit quality across the portfolio from the prior year. The current period included the addition of a \$24.9 million non-performing loan to the commercial and institutional loan portfolio. Furthermore, the September 30, 2016 and June 30, 2016, loan portfolios reflected a reclassification of a non-performing loan from the residential relate estate loan class to the commercial and institutional loan class due to a change in the obligor as a result of restructuring the loan as of December 31, 2015. In addition to the negative impact on net interest income and the risk of credit losses, nonperforming assets also increase operating costs due to the expense associated with collection efforts. Changes in the level of nonperforming assets may be indicative of changes in the credit quality of one or more loan classes. Changes in credit quality impact the allowance for credit losses through the resultant adjustment of the specific allowance and of the qualitative factors used in the determination of the inherent allowance levels within the allowance for credit losses.

Northern Trust's underwriting standards do not allow for the origination of loan types generally considered to be high risk in nature, such as option adjustable rate mortgages, subprime loans, loans with initial "teaser" rates and loans with excessively high loan-to-value ratios. Residential real estate loans consist of first lien mortgages and equity credit lines, which generally require loan-to-collateral values of no more than 65% to 75% at inception. Revaluations of supporting collateral are obtained upon refinancing or default or when otherwise considered warranted. Collateral revaluations for mortgages are performed by independent third parties.

The commercial real estate class consists of commercial mortgages and construction, acquisition and development loans extended to experienced investors well known to Northern Trust. Underwriting standards generally reflect conservative loan-to-value ratios and debt service coverage requirements. Recourse to borrowers through guarantees is also commonly required.

### Provision and Allowance for Credit Losses

The provision for credit losses is the charge to current-period earnings that is determined by management, through a disciplined credit review process, to be the amount needed to maintain the allowance for credit losses at an appropriate level to absorb probable

## **ASSET QUALITY (continued)**

### **Provision and Allowance for Credit Losses (continued)**

credit losses that have been identified with specific borrower relationships (specific loss component) and for probable losses that are believed to be inherent in the loan and lease portfolios, undrawn commitments and standby letters of credit (inherent loss component). Control processes and analyses employed to evaluate the appropriateness of the allowance for credit losses are reviewed on at least an annual basis and modified as necessary.

The amount of specific allowance is determined through an individual evaluation of loans and lending-related commitments considered impaired that is based on expected future cash flows, collateral value and other factors that may impact the borrower's ability to pay. The inherent component of the allowance addresses exposure relating to probable but unidentified credit-related losses. The inherent component of the allowance also covers the credit exposure associated with undrawn loan commitments and standby letters of credit. To estimate the allowance for credit losses on these instruments, management uses conversion rates to determine the estimated amount that will be drawn and assigns an allowance factor determined in accordance with the methodology utilized for outstanding loans.

The provision for credit losses was a credit of \$3.0 million in the current quarter, compared to a credit provision of \$10.0 million in the prior-year quarter. Net recoveries were \$0.8 million, resulting from \$3.0 million of charge-offs and \$3.8 million of recoveries, compared to \$9.4 million of net charge-offs in the prior-year quarter, resulting from \$11.9 million of charge-offs and \$2.5 million of recoveries. Residential real estate loans accounted for 57% and 77% of total nonperforming loans and leases at September 30, 2016 and 2015, respectively.

Note 7 to the consolidated financial statements includes a table that details the changes in the allowance for credit losses during the three and nine months ended September 30, 2016 and 2015 due to charge-offs, recoveries and provisions for credit losses.

**ASSET QUALITY (continued)**
**Provision and Allowance for Credit Losses (continued)**

The following table shows the specific portion of the allowance and the inherent portion of the allowance and its components by loan and lease segment and class.

**Table 24: Allocation of the Allowance for Credit Losses**

	September 30, 2016		June 30, 2016		September 30, 2015	
	Allowance Amount	Percent of Loans to Total Loans	Allowance Amount	Percent of Loans to Total Loans	Allowance Amount	Percent of Loans to Total Loans
(\$ In Millions)						
Specific Allowance	\$ 9.1	—%	\$ 1.3	—%	\$ 4.0	—%
Allocated Inherent Allowance						
Commercial						
Commercial and Institutional	35.9	28	38.9	29	66.1	28
Commercial Real Estate	72.1	12	70.5	11	63.5	12
Lease Financing, net	0.4	1	1.7	1	3.6	2
Non-U.S.	—	4	—	6	2.3	4
Other	—	1	2.5	1	—	—
Total Commercial	108.4	46	113.6	48	135.5	46
Personal						
Residential Real Estate	85.3	24	91.0	24	95.9	27
Private Client	19.8	30	21.2	28	19.3	27
Other	2.3	—	—	—	—	—
Total Personal	107.4	54	112.2	52	115.2	54
Total Allocated Inherent Allowance	\$ 215.8	100%	\$ 225.8	100%	\$ 250.7	100%
Total Allowance for Credit Losses	\$ 224.9		\$ 227.1		\$ 254.7	
Allowance Assigned to						
Loans and Leases	\$ 191.0		\$ 192.0		\$ 242.2	
Undrawn Commitments and Standby Letters of Credit	33.9		35.1		12.5	
Total Allowance for Credit Losses	\$ 224.9		\$ 227.1		\$ 254.7	
Allowance Assigned to Loans and Leases to Total Loans and Leases	0.57%		0.56%		0.73%	

## MARKET RISK MANAGEMENT

Northern Trust faces two primary types of market risk through its business operations: interest rate risk, which is the potential for movements in interest rates to cause changes in earnings and the economic value of equity; and trading risk, which is the potential for movements in market variables such as foreign exchange rates and interest rates to cause changes in the value of trading positions.

Northern Trust uses two primary measurement techniques to manage interest rate risk: sensitivity of earnings (SOE) and sensitivity of economic value of equity (SEVE). SOE provides management with a short-term view of the impact of interest rate changes on future earnings. SEVE provides management with a long-term view of interest rate changes on the economic value of equity as of the period-end balance sheet. Both simulation models use the same initial market interest rates and product balances. These two techniques, which are performed monthly, are complementary and are used in concert to provide a comprehensive interest rate risk management capability.

As part of its risk management activities, Northern Trust also regularly measures the risk of loss associated with foreign currency positions using a Value-at-Risk (VaR) model. The following information about Northern Trust's management of market risk should be read in conjunction with the Annual Report on Form 10-K for the year ended December 31, 2015.

**Sensitivity of Earnings** — The modeling of SOE incorporates on-balance-sheet positions, as well as derivative financial instruments (principally interest rate swaps) that are used to manage interest rate risk. Northern Trust uses market-implied forward interest rates as the base case and measures the sensitivity (i.e. change) in earnings if future rates are 100 or 200 basis points higher than base case forward rates. The following table shows the estimated impact on the next twelve months of pre-tax earnings of 100 and 200 basis point upward movements in interest rates relative to forward rates. Given the low level of interest rates, the simulation of earnings for rates 100 and 200 basis points lower would not provide meaningful results.

**Table 25: Interest Rate Risk Simulation of Pre-Tax Earnings Excluding Fee Waivers**

<u>(\$ In Millions)</u>	<u>Increase/(Decrease) Estimated Impact on Next Twelve Months of Pre-Tax Earnings</u>
<b>Increase in Interest Rates Above Market-Implied Forward Rates</b>	
100 Basis Points	\$ 12
200 Basis Points	(15)

The simulations of earnings incorporate several assumptions but do not incorporate any management actions that may be used to mitigate negative consequences of actual interest rate movements. For that reason and others, they do not reflect the likely actual results but serve as conservative estimates of interest rate risk. SOE is not directly comparable to actual results disclosed elsewhere or directly predictive of future values of other measures provided.

**Sensitivity of Economic Value of Equity** — Economic value of equity is defined as the present value of assets minus the present value of liabilities, net of the value of instruments that are used to manage the interest rate risk of balance sheet items. The potential effect of interest rate changes on economic equity is derived from the impact of such changes on projected future cash flows and the present value of these cash flows and is then compared to the established limit. Northern Trust uses current market rates (and the future rates implied by these market rates) as the base case and measures the sensitivity (i.e. change) if current rates are immediately increased by 100 or 200 basis points. The following table shows the estimated impact on economic value of equity of 100 and 200 basis point upward movements from current interest rates. Given the low level of interest rates and assumed interest rate floors as rates approach zero, the simulation of the economic value of equity for rates 100 or 200 basis points lower would not provide meaningful results.

**Table 26: Interest Rate Risk Simulation of Economic Value of Equity as of September 30, 2016**

<u>(\$ In Millions)</u>	<u>Increase/(Decrease) Estimated Impact on Economic Value of Equity</u>
<b>Increase in Interest Rates Above Market Rates</b>	
100 Basis Points	\$ 54
200 Basis Points	(173)

## MARKET RISK MANAGEMENT (continued)

The simulations of economic value of equity incorporate several assumptions but do not incorporate any management actions that may be used to mitigate negative consequences of actual interest rate movements. For that reason and others, they do not reflect the likely actual results but serve as conservative estimates of interest rate risk. SEVE is not directly comparable to actual results disclosed elsewhere or directly predictive of future values of other measures provided.

**Foreign Currency Value-At-Risk (VaR)** — Northern Trust measures daily the risk of loss associated with all non-U.S. currency positions using a VaR model and applying the historical simulation methodology. This statistical model provides estimates, based on a variety of high confidence levels, of the potential loss in value that might be incurred if an adverse shift in non-U.S. currency exchange rates were to occur over a small number of days. The model incorporates foreign currency and interest rate volatilities and correlations in price movements among the currencies. VaR is computed for each trading desk and for the global portfolio.

Northern Trust monitors several variations of the foreign exchange VaR measures to meet specific regulatory and internal management needs. Variations include different methodologies (historical, variance-covariance and Monte Carlo), equally-weighted and exponentially-weighted volatilities, horizons of one day and ten days, confidence levels ranging from 95% to 99.95% and look-back periods of one year and four years. The table below presents the levels of total regulatory VaR and its subcomponents for global foreign currency as of September 30, 2016 and June 30, 2016, based on the historical simulation methodology, a 99% confidence level, a one-day horizon and equally-weighted volatility. The total VaR for foreign currency is typically less than the sum of its two components due to diversification benefits derived from the two subcomponents.

**Table 27: Foreign Currency Value-At-Risk**

(\$ In Millions)	Total VaR (Spot and Forward)		Foreign Exchange Spot VaR		Foreign Exchange Forward VaR	
	September 30, 2016	June 30, 2016	September 30, 2016	June 30, 2016	September 30, 2016	June 30, 2016
High	\$ 1.0	\$ 0.6	\$ 0.4	\$ 0.5	\$ 0.9	\$ 0.5
Low	0.2	0.2	—	—	0.2	0.2
Average	0.4	0.4	0.1	0.2	0.4	0.3
Quarter-End	0.4	0.5	0.4	0.3	0.3	0.3

## RECONCILIATION OF CERTAIN REPORTED ITEMS TO FULLY TAXABLE EQUIVALENTS

The tables below present reconciliations of interest income, net interest income, net interest margin, and revenue prepared in accordance with GAAP to such measures on an FTE basis, which are non-GAAP financial measures. Management believes this presentation provides a clearer indication of these financial measures for comparative purposes. When adjusted to an FTE basis, yields on taxable, nontaxable and partially taxable assets are comparable; however, the adjustment to an FTE basis has no impact on net income.

**Table 28: Reconciliation of Reported Revenue and Net Interest Income to Fully Taxable Equivalent**

(\$ In Millions)	Three Months Ended					
	September 30, 2016			September 30, 2015		
	Reported	FTE Adj.	FTE	Reported	FTE Adj.	FTE
Interest Income	\$ 349.2	\$ 7.0	\$ 356.2	\$ 305.7	\$ 6.1	\$ 311.8
Interest Expense	46.1	—	46.1	36.8	—	36.8
Net Interest Income	\$ 303.1	\$ 7.0	\$ 310.1	\$ 268.9	\$ 6.1	\$ 275.0
Net Interest Margin	1.12%		1.14%	1.06%		1.08%
Revenue	\$ 1,213.7	\$ 7.0	\$ 1,220.7	1,155.5	6.1	1,161.6

  

(\$ In Millions)	Nine Months Ended					
	September 30, 2016			September 30, 2015		
	Reported	FTE Adj.	FTE	Reported	FTE Adj.	FTE
Interest Income	\$ 1,045.9	\$ 20.1	\$ 1,066.0	\$ 893.3	\$ 18.7	\$ 912.0
Interest Expense	135.2	—	135.3	112.6	—	112.6
Net Interest Income	\$ 910.7	\$ 20.1	\$ 930.7	\$ 780.7	\$ 18.7	\$ 799.4
Net Interest Margin	1.14%		1.17%	1.03%		1.06%
Revenue	\$ 3,720.4	\$ 20.1	\$ 3,740.5	\$ 3,545.9	\$ 18.7	\$ 3,564.6

## FORWARD-LOOKING STATEMENTS

This report may include statements which constitute “forward-looking statements” within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are identified typically by words or phrases such as “believe,” “expect,” “anticipate,” “intend,” “estimate,” “project,” “likely,” “plan,” “goal,” “target,” “strategy,” and similar expressions or future or conditional verbs such as “may,” “will,” “should,” “would,” and “could.” Forward-looking statements include statements, other than those related to historical facts, that relate to Northern Trust’s financial results and outlook, capital adequacy, dividend policy, accounting estimates and assumptions, credit quality including allowance levels, future pension plan contributions, anticipated tax benefits, anticipated expense levels, spending related to technology and regulatory initiatives, risk management policies, contingent liabilities, strategic initiatives, industry trends, and expectations regarding the impact of recent legislation and accounting pronouncements. These statements are based on Northern Trust’s current beliefs and expectations of future events or future results, and involve risks and uncertainties that are difficult to predict and subject to change. These statements are also based on assumptions about many important factors, including:

- financial market disruptions or economic recession, whether in the United States, Europe, the Middle East, Asia or other regions;
- volatility or changes in financial markets, including debt and equity markets, that impact the value, liquidity, or credit ratings of financial assets in general, or financial assets held in particular investment funds or client portfolios, including those funds, portfolios, and other financial assets with respect to which Northern Trust has taken, or may in the future take, actions to provide asset value stability or additional liquidity;
- the impact of equity markets on fee revenue;
- the voluntary departure of the United Kingdom from the European Union pursuant to the “Brexit” referendum and the impact thereof on financial markets and economic conditions across the globe;
- the downgrade of U.S. government-issued and other securities;
- changes in foreign exchange trading client volumes and volatility in foreign currency exchange rates, changes in the valuation of the U.S. dollar relative to other currencies in which Northern Trust records revenue or accrues expenses, and Northern Trust’s success in assessing and mitigating the risks arising from all such changes and volatility;
- a decline in the value of securities held in Northern Trust’s investment portfolio, particularly asset-backed securities, the liquidity and pricing of which may be negatively impacted by periods of economic turmoil and financial market disruptions;
- Northern Trust’s ability to address operating risks, including cyber-security or data security breach risks, human errors or omissions, pricing or valuation of securities, fraud, systems performance or defects, systems interruptions, and breakdowns in processes or internal controls;
- Northern Trust’s success in responding to and investing in changes and advancements in technology;
- a significant downgrade of any of Northern Trust’s debt ratings;
- the health and soundness of the financial institutions and other counterparties with which Northern Trust conducts business;
- uncertainties inherent in the complex and subjective judgments required to assess credit risk and establish appropriate allowances therefor;
- the pace and extent of continued globalization of investment activity and growth in worldwide financial assets;
- changes in interest rates or in the monetary or other policies of various regulatory authorities or central banks;
- changes in the legal, regulatory and enforcement framework and oversight applicable to financial institutions, including changes that may affect leverage limits and risk-based capital and liquidity requirements, require financial institutions to pay higher assessments, expose financial institutions to certain liabilities of their subsidiary depository institutions, or restrict or increase the regulation of certain activities carried on by financial institutions, including Northern Trust;
- increased costs of compliance and other risks associated with changes in regulation, the current regulatory environment, and areas of increased regulatory emphasis and oversight in the United States and other countries, such as anti-money laundering, anti-bribery, and client privacy;
- failure to satisfy regulatory standards or to obtain regulatory approvals when required, including for the use and distribution of capital;
- changes in tax laws, accounting requirements or interpretations and other legislation in the United States or other countries that could affect Northern Trust or its clients;
- geopolitical risks and the risks of extraordinary events such as natural disasters, terrorist events and war, and the responses of the United States and other countries to those events;
- changes in the nature and activities of Northern Trust’s competition;
- Northern Trust’s success in maintaining existing business and continuing to generate new business in existing and targeted markets and its ability to deploy deposits in a profitable manner consistent with its liquidity requirements;
- Northern Trust’s ability to address the complex needs of a global client base and manage compliance with legal, tax, regulatory and other requirements;
- Northern Trust’s ability to maintain a product mix that achieves acceptable margins;
- Northern Trust’s ability to continue to develop investment products and generate investment results that satisfy clients;

## **FORWARD-LOOKING STATEMENTS (continued)**

- Northern Trust's success in recruiting and retaining the necessary personnel to support business growth and expansion and maintain sufficient expertise to support increasingly complex products and services;
- Northern Trust's success in controlling expenses and implementing revenue enhancement initiatives;
- uncertainties inherent in Northern Trust's assumptions concerning its pension plan, including discount rates and expected contributions, returns and payouts;
- Northern Trust's success in improving risk management practices and controls and managing risks inherent in its businesses, including credit risk, operational risk, market and liquidity risk, fiduciary risk, compliance risk and strategic risk;
- risks and uncertainties inherent in the litigation and regulatory process, including the adequacy of contingent liability, tax, and other accruals;
- risks associated with being a holding company, including Northern Trust's dependence on dividends from its principal subsidiary;
- the risk of damage to Northern Trust's reputation which may undermine the confidence of clients, counterparties, rating agencies, and stockholders; and
- other factors identified elsewhere in the Corporation's Annual Report on Form 10-K for the year ended December 31, 2015, including those factors described in Item 1A, "Risk Factors," and other filings with the SEC, all of which are available on Northern Trust's website.

Actual results may differ materially from those expressed or implied by the forward-looking statements. The information contained herein is current only as of the date of that information. All forward-looking statements included in this document are based upon information presently available, and Northern Trust assumes no obligation to update its forward-looking statements.



**Item 1. Consolidated Financial Statements (unaudited)**

**CONSOLIDATED BALANCE SHEETS**

**NORTHERN TRUST CORPORATION**

(In Millions Except Share Information)

	September 30, 2016 (Unaudited)	December 31, 2015
<b>Assets</b>		
Cash and Due from Banks	\$ 4,892.7	\$ 6,418.5
Federal Reserve and Other Central Bank Deposits	22,208.7	23,695.5
Interest-Bearing Deposits with Banks	5,855.8	6,872.2
Federal Funds Sold and Securities Purchased under Agreements to Resell Securities	2,066.0	1,614.2
Available for Sale	35,973.6	32,317.9
Held to Maturity (Fair value of \$8,733.1 and \$5,227.5)	8,716.0	5,248.3
Trading Account	0.8	1.2
Total Securities	<u>44,690.4</u>	<u>37,567.4</u>
Loans and Leases		
Commercial	15,577.9	15,156.5
Personal	17,845.1	18,024.4
Total Loans and Leases (Net of unearned income of \$44.4 and \$103.6)	<u>33,423.0</u>	<u>33,180.9</u>
Allowance for Credit Losses Assigned to Loans and Leases	(191.0)	(193.8)
Buildings and Equipment	438.8	446.9
Client Security Settlement Receivables	1,984.5	2,157.0
Goodwill	524.4	526.4
Other Assets	4,191.7	4,464.4
Total Assets	<u>\$ 120,085.0</u>	<u>\$ 116,749.6</u>
<b>Liabilities</b>		
Deposits		
Demand and Other Noninterest-Bearing	\$ 22,609.1	\$ 23,435.5
Savings and Money Market	14,779.2	15,035.9
Savings Certificates and Other Time	1,507.7	1,455.8
Non U.S. Offices — Noninterest-Bearing	6,551.0	6,719.9
— Interest-Bearing	54,024.3	50,221.8
Total Deposits	<u>99,471.3</u>	<u>96,868.9</u>
Federal Funds Purchased	378.5	351.5
Securities Sold Under Agreements to Repurchase	301.8	546.6
Other Borrowings	4,002.4	4,055.1
Senior Notes	1,496.4	1,497.4
Long-Term Debt	1,400.9	1,371.3
Floating Rate Capital Debt	277.4	277.3
Other Liabilities	3,176.5	3,075.6
Total Liabilities	<u>110,505.2</u>	<u>108,043.7</u>
<b>Stockholders' Equity</b>		
Preferred Stock, No Par Value; Authorized 10,000,000 shares:		
Series C, outstanding shares of 16,000	388.5	388.5
Series D, outstanding shares of 5,000	493.5	—
Common Stock, \$1.66 2/3 Par Value; Authorized 560,000,000 shares;		
Outstanding shares of 226,431,104 and 229,293,783	408.6	408.6
Additional Paid-In Capital	1,038.6	1,072.3
Retained Earnings	8,736.1	8,242.8
Accumulated Other Comprehensive Loss	(259.7)	(372.7)
Treasury Stock (18,740,420 and 15,877,741 shares, at cost)	(1,225.8)	(1,033.6)
Total Stockholders' Equity	<u>9,579.8</u>	<u>8,705.9</u>
Total Liabilities and Stockholders' Equity	<u>\$ 120,085.0</u>	<u>\$ 116,749.6</u>

See accompanying notes to the consolidated financial statements.

**CONSOLIDATED STATEMENTS OF INCOME  
(UNAUDITED)**

**NORTHERN TRUST CORPORATION**

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
<i>(In Millions Except Share Information)</i>				
<b>Noninterest Income</b>				
Trust, Investment and Other Servicing Fees	\$ 788.3	\$ 749.1	\$ 2,313.7	\$ 2,233.4
Foreign Exchange Trading Income	53.6	62.9	178.5	209.3
Treasury Management Fees	15.0	16.1	47.2	48.5
Security Commissions and Trading Income	20.4	20.4	59.9	60.2
Other Operating Income	33.1	38.1	212.4	214.1
Investment Security Gains (Losses), net (Note)	0.2	—	(1.9)	(0.3)
Total Noninterest Income	910.6	886.6	2,809.8	2,765.2
<b>Net Interest Income</b>				
Interest Income	349.2	305.7	1,045.9	893.3
Interest Expense	46.1	36.8	135.3	112.6
Net Interest Income	303.1	268.9	910.6	780.7
Provision for Credit Losses	(3.0)	(10.0)	(4.0)	(24.5)
Net Interest Income after Provision for Credit Losses	306.1	278.9	914.6	805.2
<b>Noninterest Expense</b>				
Compensation	382.1	361.6	1,150.4	1,077.8
Employee Benefits	73.2	69.8	216.0	215.9
Outside Services	157.6	158.3	466.5	440.6
Equipment and Software	114.5	113.6	346.7	338.3
Occupancy	44.2	43.7	130.4	129.7
Other Operating Expense	71.4	65.3	286.8	253.5
Total Noninterest Expense	843.0	812.3	2,596.8	2,455.8
Income before Income Taxes	373.7	353.2	1,127.6	1,114.6
Provision for Income Taxes	116.1	118.6	361.6	380.1
<b>Net Income</b>	\$ 257.6	\$ 234.6	\$ 766.0	\$ 734.5
Preferred Stock Dividends	5.9	5.8	17.6	17.5
<b>Net Income Applicable to Common Stock</b>	\$ 251.7	\$ 228.8	\$ 748.4	\$ 717.0
<b>Per Common Share</b>				
Net Income — Basic	\$ 1.09	\$ 0.97	\$ 3.23	\$ 3.03
— Diluted	1.08	0.96	3.21	3.00
<b>Average Number of Common Shares Outstanding</b>				
— Basic	226,540,086	232,231,720	227,561,218	232,916,425
— Diluted	228,055,195	234,163,190	229,040,618	234,890,782
Note: Changes in Other-Than-Temporary-Impairment (OTTI) Losses	\$ —	\$ —	\$ (2.4)	\$ —
Noncredit-related OTTI Losses Recorded in/(Reclassified from) OCI	—	—	—	—
Other Security Gains (Losses), net	0.2	—	0.5	(0.3)
Investment Security Gains (Losses), net	\$ 0.2	\$ —	\$ (1.9)	\$ (0.3)

**CONSOLIDATED STATEMENTS OF  
COMPREHENSIVE INCOME (UNAUDITED)**

**NORTHERN TRUST CORPORATION**

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
<i>(In Millions)</i>				
<b>Net Income</b>	\$ 257.6	\$ 234.6	\$ 766.0	\$ 734.5
<b>Other Comprehensive Income (Loss) (Net of Tax and Reclassifications)</b>				
Net Unrealized Gains (Losses) on Securities Available for Sale	(13.9)	(7.0)	94.3	24.7
Net Unrealized Gains on Cash Flow Hedges	—	3.2	6.6	5.3
Foreign Currency Translation Adjustments	(9.5)	(2.3)	0.7	(2.4)
Pension and Other Postretirement Benefit Adjustments	3.3	6.1	11.4	18.4
Other Comprehensive Income (Loss)	(20.1)	—	113.0	46.0
<b>Comprehensive Income</b>	\$ 237.5	\$ 234.6	\$ 879.0	\$ 780.5

See accompanying notes to the consolidated financial statements.

**CONSOLIDATED STATEMENTS OF CHANGES IN  
STOCKHOLDERS' EQUITY  
(UNAUDITED)**

**NORTHERN TRUST CORPORATION**

(In Millions)	Nine Months Ended September 30,	
	2016	2015
<b>Preferred Stock</b>		
Series C, Balance at January 1 and September 30	\$ 388.5	\$ 388.5
Issuance of Preferred Stock, Series D	493.5	—
Balance at September 30	<u>882.0</u>	<u>388.5</u>
<b>Common Stock</b>		
Balance at January 1 and September 30	408.6	408.6
<b>Additional Paid-in Capital</b>		
Balance at January 1	1,072.3	1,050.9
Treasury Stock Transactions — Stock Options and Awards	(91.8)	(69.7)
Stock Options and Awards — Amortization	67.1	59.9
Stock Options and Awards — Tax Benefit	(9.0)	17.6
Balance at September 30	<u>1,038.6</u>	<u>1,058.7</u>
<b>Retained Earnings</b>		
Balance at January 1	8,242.8	7,625.4
Net Income	766.0	734.5
Dividends Declared — Common Stock	(255.1)	(248.7)
Dividends Declared — Preferred Stock	(17.6)	(17.5)
Balance at September 30	<u>8,736.1</u>	<u>8,093.7</u>
<b>Accumulated Other Comprehensive Income (Loss)</b>		
Balance at January 1	(372.7)	(319.7)
Net Unrealized Gains on Securities Available for Sale	94.3	24.7
Net Unrealized Gains (Losses) on Cash Flow Hedges	6.6	5.3
Foreign Currency Translation Adjustments	0.7	(2.4)
Pension and Other Postretirement Benefit Adjustments	11.4	18.4
Balance at September 30	<u>(259.7)</u>	<u>(273.7)</u>
<b>Treasury Stock</b>		
Balance at January 1	(1,033.6)	(704.8)
Stock Options and Awards	153.9	157.9
Stock Purchased	(346.1)	(344.4)
Balance at September 30	<u>(1,225.8)</u>	<u>(891.3)</u>
<b>Total Stockholders' Equity at September 30</b>	<u>\$ 9,579.8</u>	<u>\$ 8,784.5</u>

See accompanying notes to the consolidated financial statements.

**CONSOLIDATED STATEMENTS OF CASH FLOWS  
(UNAUDITED)**

**NORTHERN TRUST CORPORATION**

(In Millions)	Nine Months Ended September 30,	
	2016	2015
<b>Cash Flows from Operating Activities:</b>		
Net Income	\$ 766.0	\$ 734.5
Adjustments to Reconcile Net Income to Net Cash Provided by Operating Activities:		
Investment Security Losses, net	1.9	0.3
Amortization and Accretion of Securities and Unearned Income, net	65.6	43.0
Provision for Credit Losses	(4.0)	(24.5)
Depreciation on Buildings and Equipment	66.8	67.4
Amortization of Computer Software	203.6	185.9
Amortization of Intangibles	6.3	8.8
Pension Plan Contributions	(9.1)	(16.5)
Change in Receivables	(80.5)	(13.3)
Change in Interest Payable	0.7	(5.9)
Change in Collateral With Derivative Counterparties, net	(330.1)	(165.7)
Other Operating Activities, net	(15.7)	(330.2)
Net Cash Provided by Operating Activities	<u>671.5</u>	<u>483.8</u>
<b>Cash Flows from Investing Activities:</b>		
Net Change in Federal Funds Sold and Securities Purchased under Agreements to Resell	(445.2)	(192.9)
Change in Interest-Bearing Deposits with Banks	1,136.3	(1,399.9)
Net Change in Federal Reserve and Other Central Bank Deposits	789.7	(3,239.8)
Purchases of Securities — Held to Maturity	(5,757.3)	(7,216.7)
Proceeds from Maturity and Redemption of Securities — Held to Maturity	1,991.6	5,288.3
Purchases of Securities — Available for Sale	(11,081.1)	(7,633.7)
Proceeds from Sale, Maturity and Redemption of Securities — Available for Sale	7,548.0	6,103.4
Change in Loans and Leases	(239.3)	(1,764.9)
Purchases of Buildings and Equipment	(58.0)	(55.3)
Purchases and Development of Computer Software	(250.4)	(229.0)
Change in Client Security Settlement Receivables	173.8	(364.2)
Acquisition of a Subsidiary, Net of Cash Received	(16.9)	—
Other Investing Activities, net	956.1	181.4
Net Cash Used in Investing Activities	<u>(5,252.7)</u>	<u>(10,523.3)</u>
<b>Cash Flows from Financing Activities:</b>		
Change in Deposits	3,149.2	10,940.6
Change in Federal Funds Purchased	27.0	(589.4)
Change in Securities Sold under Agreements to Repurchase	(244.8)	(400.6)
Change in Short-Term Other Borrowings	(41.9)	2,346.1
Repayments of Senior Notes and Long-Term Debt	(4.2)	(229.5)
Proceeds from Issuance of Preferred Stock - Series D	493.5	—
Treasury Stock Purchased	(346.1)	(344.4)
Net Proceeds from Stock Options	62.0	88.2
Cash Dividends Paid on Common Stock	(246.9)	(237.8)
Cash Dividends Paid on Preferred Stock	(17.6)	(21.2)
Other Financing Activities, net	(8.7)	17.4
Net Cash Provided by Financing Activities	<u>2,821.5</u>	<u>11,569.4</u>
Effect of Foreign Currency Exchange Rates on Cash	233.9	(105.8)
(Decrease) Increase in Cash and Due from Banks	<u>(1,525.8)</u>	<u>1,424.1</u>
Cash and Due from Banks at Beginning of Year	6,418.5	3,021.0
Cash and Due from Banks at End of Period	<u>\$ 4,892.7</u>	<u>\$ 4,445.1</u>
<b>Supplemental Disclosures of Cash Flow Information:</b>		
Interest Paid	\$ 134.1	\$ 120.0
Income Taxes Paid	596.9	526.9
Transfers from Loans to OREO	12.0	10.4

See accompanying notes to the consolidated financial statements.

## Notes to Consolidated Financial Statements (unaudited)

**1. Basis of Presentation** — The consolidated financial statements include the accounts of Northern Trust Corporation (the Corporation) and its wholly-owned subsidiary, The Northern Trust Company (the Bank), and various other wholly-owned subsidiaries of the Corporation and the Bank. Throughout the notes, the term “Northern Trust” refers to the Corporation and its subsidiaries. Intercompany balances and transactions have been eliminated. The consolidated financial statements, as of and for the periods ended September 30, 2016 and 2015, have not been audited by the Corporation’s independent registered public accounting firm. In the opinion of management, all accounting entries and adjustments, including normal recurring accruals, necessary for a fair presentation of the financial position and the results of operations for the interim periods have been made. The accounting and financial reporting policies of Northern Trust conform to U.S. generally accepted accounting principles (GAAP) and reporting practices prescribed by the banking industry. Certain amounts in prior periods have been reclassified to conform with the current year’s presentation. For a description of Northern Trust’s significant accounting policies, refer to Note 1 of the Notes to Consolidated Financial Statements in the Annual Report on Form 10-K for the year ended December 31, 2015.

**Change in Presentation.** Based on the increase in trade clearing activity taking place outside of the United States, during the nine months ended September 30, 2016, Northern Trust became a participant in the Clearing House Automated Payment System (CHAPS) in the United Kingdom. In addition, Northern Trust anticipates becoming a participant in the European solution for securities settlements, the Target 2 Securities (T2S) platform, in 2017. As a part of the implementation of these programs, management assessed the nature of Northern Trust’s deposits with non-U.S. central banks and determined that they were similar to the deposits Northern Trust has with the Federal Reserve. As such, during the nine months ended September 30, 2016, the presentation of non-U.S. central bank deposits was combined with the presentation of Federal Reserve deposits on a single financial statement line, Federal Reserve and Other Central Bank Deposits, on the face of the consolidated balance sheets. Northern Trust determined that this change in presentation was material to the financial statements and has revised the prior period presentation of the consolidated balance sheets, statements of cash flows and applicable notes to the financial statements. This change in presentation has no impact on the consolidated statements of income, comprehensive income or changes in stockholders’ equity.

The table below shows the effect of the change in presentation on the Corporation’s consolidated balance sheets and statements of cash flows for the periods presented.

**Table 29: Change in Presentation**

Consolidated Balance Sheets	December 31, 2015		
	Previously Reported	Adjustment	Revised
(In Millions)			
Cash and Due from Banks	\$ 6,444.6	\$ (26.1)	\$ <b>6,418.5</b>
Federal Reserve Deposits	16,398.5	(16,398.5)	—
Federal Reserve and Other Central Bank Deposits	—	23,695.5	<b>23,695.5</b>
Interest-Bearing Deposits with Banks	14,143.1	(7,270.9)	<b>6,872.2</b>
Consolidated Statements of Cash Flows	Nine Months Ended September 30, 2015		
(In Millions)	Previously Reported	Adjustment	Revised
Change in Interest-Bearing Deposits with Banks	\$ 238.7	\$ (1,638.6)	\$ <b>(1,399.9)</b>
Net Change in Federal Reserve Deposits	(4,865.7)	4,865.7	—
Net Change in Federal Reserve and Other Central Bank Deposits	—	(3,239.8)	<b>(3,239.8)</b>
Net Cash Used in Investing Activities	(10,510.6)	(12.7)	<b>(10,523.3)</b>
Effect of Foreign Currency Exchange Rates on Cash	(107.3)	1.5	<b>(105.8)</b>
Increase in Cash and Due from Banks	1,435.3	(11.2)	<b>1,424.1</b>
Cash and Due from Banks at Beginning of Year	3,050.6	(29.6)	<b>3,021.0</b>
Cash and Due from Banks at End of Period	4,485.9	(40.8)	<b>4,445.1</b>

## Notes to Consolidated Financial Statements (unaudited) (continued)

Footnote 14 Net Interest Income

(In Millions)	Three Months Ended September 30, 2015		
	Previously Reported	Adjustment	Revised
Interest-Bearing Due from and Deposits with Banks	\$ 27.0	\$ (4.9)	\$ 22.1
Federal Reserve and Other Central Bank Deposits	9.4	4.9	14.3

  

	Nine Months Ended September 30, 2015		
	Previously Reported	Adjustment	Revised
Interest-Bearing Due from and Deposits with Banks	\$ 82.3	\$ (17.4)	\$ 64.9
Federal Reserve and Other Central Bank Deposits	30.5	17.4	47.9

**2. Recent Accounting Pronouncements** — In March 2016, the Financial Accounting Standards Board (FASB) issued ASU No. 2016-09, “Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting.” ASU No. 2016-09 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.

The Corporation early adopted ASU No. 2016-09 on July 1, 2016 with an effective date of January 1, 2016, which resulted in a reclassification of \$5.9 million from additional paid-in capital to provision for income taxes, representing excess tax benefits previously recognized in additional paid-in capital during the six months ended June 30, 2016. During the three months ended September 30, 2016, the Corporation recognized a benefit of \$6.4 million in provision for income taxes for excess tax benefits that occurred in the current quarter. The early adoption favorably impacted basic and diluted EPS by \$0.03 and \$0.06 per share for the three and nine months ended September 30, 2016, respectively.

Adoption of the standard impacted the Corporation’s previously reported quarterly results as follows:

(\$ In Millions except per share data)	Three Months Ended			
	June 30, 2016		March 31, 2016	
	As Reported	As Adjusted	As Reported	As Adjusted
Provision for Income Taxes	\$ 134.0	\$ 131.7	\$ 117.4	\$ 113.8
Net Income	260.7	263.0	241.8	245.4
Earnings Allocated to Participating Securities	4.7	4.8	4.1	4.1
Net Income Applicable to Common Stock	254.9	257.2	235.9	239.5
Effective Tax Rate	33.9%	33.4%	32.7%	31.7%
Basic Earnings per Share	\$ 1.10	\$ 1.11	\$ 1.01	\$ 1.03
Diluted Earnings per Share	1.09	1.10	1.01	1.03
Diluted Weighted Average Shares Outstanding (000s)	229,197	229,280	229,980	229,798
Additional Paid-In Capital	1,040.2	1,037.9	1,022.1	1,018.5
Retained Earnings	8,566.3	8,568.6	8,394.8	8,398.4

For the nine months ended September 30, 2016, the Corporation reclassified excess tax benefits from other financing activities to other operating activities and for the nine months ended September 30, 2016 and 2015, the Corporation classified taxes paid related to net share settlement of equity awards in financing activities in the consolidated statements of cash flows, respectively.

The Corporation had no previously unrecognized excess tax benefits; therefore, there was no impact to the consolidated financial statements as it related to the elimination of the requirement that excess tax benefits be realized before recognition.

The Corporation elected to retain its existing accounting policy election regarding award forfeitures.

In May 2014, the FASB issued Accounting Standards Update (ASU) No. 2014-09, “Revenue from Contracts with Customers (Topic 606)” (ASU 2014-09). ASU 2014-09 is a converged standard between the FASB and the International Accounting Standards Board (IASB) that provides a single comprehensive revenue recognition model for all contracts with customers across transactions

## Notes to Consolidated Financial Statements (unaudited) (continued)

and industries. The primary objective of ASU 2014-09 is revenue recognition that represents the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. ASU 2014-09 is effective for interim and annual reporting periods beginning after December 15, 2017. Northern Trust is currently assessing the impact of adoption of ASU 2014-09.

In January 2016, the FASB issued ASU No. 2016-01, “Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities” (ASU 2016-01). ASU 2016-01 requires equity investments (except those accounted for under the equity method or those that result in consolidation) to be measured at fair value with changes in fair value recognized in net income unless a policy election is made for investments without readily determinable fair values. Additionally, ASU 2016-01 requires public entities to use the exit price notion when measuring the fair value of financial instruments for measurement purposes and eliminates the requirement to disclose the method(s) and significant assumptions used to estimate the fair value of financial instruments measured at amortized cost on the balance sheet. Furthermore, it requires separate presentation of financial assets and financial liabilities by measurement category and form of financial asset on the balance sheet or the accompanying notes to the financial statements. ASU 2016-01 is effective for interim and annual periods beginning after December 15, 2017. Although Northern Trust is currently assessing the impact of ASU 2016-01, it is not expected to impact significantly Northern Trust’s consolidated financial position or results of operations.

In February 2016, the FASB issued ASU No. 2016-02, “Leases (Topic 842)” (ASU 2016-02). ASU 2016-02 introduces a lessee model that brings most leases on the balance sheet, with certain specified scope exceptions. Specifically within the lessee model under ASU 2016-02, a lessee is required to recognize in the statement of financial position a liability to make lease payments, known as the lease liability, and a right-of-use asset representing its right to use the underlying asset over the lease term. ASU 2016-02 is effective for interim and annual reporting periods beginning after December 15, 2018, although early adoption is permitted. Northern Trust is currently assessing the impact of adoption of ASU 2016-02.

In June 2016, the FASB issued ASU No. 2016-13, “Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments” (ASU 2016-13). ASU 2016-13 significantly changes the way impairment of financial instruments is recognized by requiring immediate recognition of estimated credit losses expected to occur over the remaining life of financial instruments. The main provisions of ASU 2016-13 include (1) replacing the “incurred loss” approach under current GAAP with an “expected loss” model for instruments measured at amortized cost, (2) requiring entities to record an allowance for available-for-sale debt securities rather than reduce the carrying amount of the investments, as is required by the other-than-temporary-impairment model under current GAAP, and (3) a simplified accounting model for purchased credit-impaired debt securities and loans. ASU 2016-13 is effective for interim and annual reporting periods beginning after December 15, 2019, although early adoption is permitted. Northern Trust is currently assessing the impact of adoption of ASU 2016-13.

In August 2016, the FASB issued ASU No. 2016-15, “Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments” (ASU 2016-15). ASU 2016-15 provides specific guidance on eight cash flow classification issues, thereby reducing current and potential future diversity in practice in how certain cash receipts and cash payments are presented and classified in the statement of cash flows. ASU 2016-15 is effective for interim and annual reporting periods beginning after December 15, 2017, although early adoption is permitted. Northern Trust is currently assessing the impact of adoption of ASU 2016-15.

**3. Fair Value Measurements — Fair Value Hierarchy.** The following describes the hierarchy of valuation inputs (Levels 1, 2, and 3) used to measure fair value and the primary valuation methodologies used by Northern Trust for financial instruments measured at fair value on a recurring basis. Observable inputs reflect market data obtained from sources independent of the reporting entity; unobservable inputs reflect the entity’s own assumptions about how market participants would value an asset or liability based on the best information available. GAAP requires an entity measuring fair value to maximize the use of observable inputs and minimize the use of unobservable inputs and establishes a fair value hierarchy of inputs. Financial instruments are categorized within the hierarchy based on the lowest level input that is significant to their valuation. Northern Trust’s policy is to recognize transfers into and transfers out of fair value levels as of the end of the reporting period in which the transfer occurred. No transfers between fair value levels occurred during the nine months ended September 30, 2016 or the year ended December 31, 2015.

**Level 1** — Quoted, active market prices for identical assets or liabilities.

Northern Trust’s Level 1 assets are comprised of available for sale investments in U.S. treasury securities.

**Level 2** — Observable inputs other than Level 1 prices, such as quoted active market prices for similar assets or liabilities, quoted prices for identical or similar assets in inactive markets, and model-derived valuations in which all significant inputs are observable in active markets.

## Notes to Consolidated Financial Statements (unaudited) (continued)

Northern Trust's Level 2 assets include available for sale and trading account securities, the fair values of which are determined predominantly by external pricing vendors. Prices received from vendors are compared to other vendor and third-party prices. If a security price obtained from a pricing vendor is determined to exceed pre-determined tolerance levels that are assigned based on an asset type's characteristics, the exception is researched and, if the price is not able to be validated, an alternate pricing vendor is utilized, consistent with Northern Trust's pricing source hierarchy. As of September 30, 2016, Northern Trust's available for sale securities portfolio included 1,360 Level 2 securities with an aggregate market value of \$28.3 billion. All 1,360 securities were valued by external pricing vendors. As of December 31, 2015, Northern Trust's available for sale securities portfolio included 1,044 Level 2 securities with an aggregate market value of \$26.1 billion. All 1,044 securities were valued by external pricing vendors. Trading account securities, which totaled \$0.8 million and \$1.2 million as of September 30, 2016 and December 31, 2015, respectively, were all valued using external pricing vendors.

Level 2 assets and liabilities also include derivative contracts which are valued internally using widely accepted income-based models that incorporate inputs readily observable in actively quoted markets and reflect the contractual terms of the contracts. Observable inputs include foreign exchange rates and interest rates for foreign exchange contracts; interest rates for interest rate swap contracts and forward contracts; and interest rates and volatility inputs for interest rate option contracts. Northern Trust evaluates the impact of counterparty credit risk and its own credit risk on the valuation of its derivative instruments. Factors considered include the likelihood of default by Northern Trust and its counterparties, the remaining maturities of the instruments, net exposures after giving effect to master netting arrangements or similar agreements, available collateral, and other credit enhancements in determining the appropriate fair value of derivative instruments. The resulting valuation adjustments have not been considered material.

**Level 3** — Valuation techniques in which one or more significant inputs are unobservable in the marketplace.

Northern Trust's Level 3 assets consist of auction rate securities purchased in 2008 from Northern Trust clients. To estimate the fair value of auction rate securities, for which trading is limited and market prices are generally unavailable, Northern Trust developed and maintains a pricing model that discounts estimated cash flows over their estimated remaining lives. Significant inputs to the model include the contractual terms of the securities, credit risk ratings, discount rates, forward interest rates, credit/liquidity spreads, and Northern Trust's own assumptions about the estimated remaining lives of the securities. The significant unobservable inputs used in the fair value measurement are Northern Trust's own assumptions about the estimated remaining lives of the securities and the applicable discount rates. Significant increases (decreases) in the estimated remaining lives or the discount rates in isolation would result in a significantly lower (higher) fair value measurement.

Northern Trust's Level 3 liabilities consist of swaps that Northern Trust entered into with the purchaser of 1.1 million and 1.0 million shares of Visa Inc. Class B common stock (Visa Class B common shares) previously held by Northern Trust and sold in June 2016 and 2015, respectively. Pursuant to the swaps, Northern Trust retains the risks associated with the ultimate conversion of the Visa Class B common shares into shares of Visa Inc. Class A common stock (Visa Class A common shares), such that the counterparty will be compensated for any dilutive adjustments to the conversion ratio and Northern Trust will be compensated for any anti-dilutive adjustments to the ratio. The swaps also require periodic payments from Northern Trust to the counterparty calculated by reference to the market price of Visa Class A common shares and a fixed rate of interest. The fair value of the swaps is determined using a discounted cash flow methodology. The significant unobservable inputs used in the fair value measurement are Northern Trust's own assumptions about estimated changes in the conversion rate of the Visa Class B common shares into Visa Class A common shares, the date on which such conversion is expected to occur and the estimated growth rate of the Visa Class A common share price. See "Visa Class B Common Shares" under Note 19 — Contingent Liabilities for further information.

Northern Trust believes its valuation methods for its assets and liabilities carried at fair value are appropriate; however, the use of different methodologies or assumptions, particularly as applied to Level 3 assets and liabilities, could have a material effect on the computation of their estimated fair values.



**Notes to Consolidated Financial Statements (unaudited) (continued)**

The following presents the fair values of, and the valuation techniques, significant unobservable inputs, and quantitative information used to develop significant unobservable inputs for, Northern Trust's Level 3 assets and liabilities as of September 30, 2016 and December 31, 2015.

**Table 30: Level 3 Significant Unobservable Inputs**

September 30, 2016				
<u>Financial Instrument</u>	Fair Value	Valuation Technique	Unobservable Inputs	Range of Lives and Rates
<b>Auction Rate Securities</b>	<b>\$ 5.8 million</b>	<b>Discounted Cash Flow</b>	<b>Remaining lives</b>	<b>2.67 — 8.64 years</b>
			<b>Discount rates</b>	<b>0.5% — 2.8%</b>
<b>Swaps Related to Sale of Certain Visa Class B Common Shares</b>	<b>\$ 29.5 million</b>	<b>Discounted Cash Flow</b>	<b>Visa Class A Appreciation</b>	<b>8.0% — 12.0%</b>
			<b>Conversion Rate</b>	<b>1.63x — 1.65x</b>
			<b>Expected Duration</b>	<b>1.75 — 4.75 years</b>
December 31, 2015				
<u>Financial Instrument</u>	Fair Value	Valuation Technique	Unobservable Inputs	Range of Lives and Rates
Auction Rate Securities	\$ 17.1 million	Discounted Cash Flow	Remaining lives	0.42 — 8.64 years
			Discount rates	0.3% — 4.4%
Swap Related to Sale of Certain Visa Class B Common Shares	\$ 10.8 million	Discounted Cash Flow	Visa Class A Appreciation	9.5% — 15.0%
			Conversion Rate	1.61x — 1.65x
			Expected Duration	1.50 — 4.50 years

## Notes to Consolidated Financial Statements (unaudited) (continued)

The following tables present assets and liabilities measured at fair value on a recurring basis as of September 30, 2016 and December 31, 2015, segregated by fair value hierarchy level.

**Table 31: Recurring Basis Hierarchy Leveling**

(In Millions)	Level 1	Level 2	Level 3	Netting	Assets/Liabilities at Fair Value
<b>September 30, 2016</b>					
Securities					
Available for Sale					
U.S. Government	\$ 7,663.9	\$ —	\$ —	\$ —	\$ 7,663.9
Obligations of States and Political Subdivisions	—	774.8	—	—	774.8
Government Sponsored Agency	—	18,024.4	—	—	18,024.4
Non-U.S. Government	—	420.1	—	—	420.1
Corporate Debt	—	3,908.4	—	—	3,908.4
Covered Bonds	—	1,244.5	—	—	1,244.5
Sub-Sovereign, Supranational and Non-U.S. Agency Bonds	—	1,170.0	—	—	1,170.0
Other Asset-Backed	—	2,254.1	—	—	2,254.1
Auction Rate	—	—	5.8	—	5.8
Commercial Mortgage-Backed	—	448.7	—	—	448.7
Other	—	58.9	—	—	58.9
Total Available for Sale	<u>7,663.9</u>	<u>28,303.9</u>	<u>5.8</u>	<u>—</u>	<u>35,973.6</u>
Trading Account	—	0.8	—	—	0.8
Total Available for Sale and Trading Securities	<u>7,663.9</u>	<u>28,304.7</u>	<u>5.8</u>	<u>—</u>	<u>35,974.4</u>
Other Assets					
Derivative Assets					
Foreign Exchange Contracts	—	2,328.4	—	—	2,328.4
Interest Rate Contracts	—	337.3	—	—	337.3
Total Derivative Assets	<u>—</u>	<u>2,665.7</u>	<u>—</u>	<u>(1,677.8)</u>	<u>987.9</u>
Other Liabilities					
Derivative Liabilities					
Foreign Exchange Contracts	—	2,236.6	—	—	2,236.6
Interest Rate Contracts	—	225.1	—	—	225.1
Other Financial Derivatives <sup>(1)</sup>	—	—	29.5	—	29.5
Total Derivative Liabilities	<u>\$ —</u>	<u>\$ 2,461.7</u>	<u>\$ 29.5</u>	<u>\$ (2,107.3)</u>	<u>\$ 383.9</u>

Note: Northern Trust has elected to net derivative assets and liabilities when legally enforceable master netting arrangements or similar agreements exist between Northern Trust and the counterparty. As of September 30, 2016, derivative assets and liabilities shown above also include reductions of \$339.0 million and \$768.5 million, respectively, as a result of cash collateral received from and deposited with derivative counterparties.

<sup>(1)</sup> This line consists of swaps related to the sale of certain Visa Class B common shares.

**Notes to Consolidated Financial Statements (unaudited) (continued)**

(In Millions)	Level 1	Level 2	Level 3	Netting	Assets/Liabilities at Fair Value
<b>December 31, 2015</b>					
<b>Securities</b>					
Available for Sale					
U.S. Government	\$ 6,178.3	\$ —	\$ —	\$ —	\$ 6,178.3
Obligations of States and Political Subdivisions	—	36.4	—	—	36.4
Government Sponsored Agency	—	16,366.8	—	—	16,366.8
Non-U.S. Government	—	309.5	—	—	309.5
Corporate Debt	—	3,712.2	—	—	3,712.2
Covered Bonds	—	1,870.2	—	—	1,870.2
Sub-Sovereign, Supranational and Non-U.S. Agency Bonds	—	859.4	—	—	859.4
Other Asset-Backed	—	2,500.1	—	—	2,500.1
Auction Rate	—	—	17.1	—	17.1
Commercial Mortgage-Backed	—	374.4	—	—	374.4
Other	—	93.5	—	—	93.5
Total Available for Sale	<u>6,178.3</u>	<u>26,122.5</u>	<u>17.1</u>	<u>—</u>	<u>32,317.9</u>
Trading Account	—	1.2	—	—	1.2
Total Available for Sale and Trading Securities	<u>6,178.3</u>	<u>26,123.7</u>	<u>17.1</u>	<u>—</u>	<u>32,319.1</u>
<b>Other Assets</b>					
Derivative Assets					
Foreign Exchange Contracts	—	2,623.4	—	—	2,623.4
Interest Rate Contracts	—	228.5	—	—	228.5
Total Derivative Assets	<u>—</u>	<u>2,851.9</u>	<u>—</u>	<u>(1,600.2)</u>	<u>1,251.7</u>
<b>Other Liabilities</b>					
Derivative Liabilities					
Foreign Exchange Contracts	—	2,519.4	—	—	2,519.4
Interest Rate Contracts	—	131.2	—	—	131.2
Other Financial Derivatives <sup>(1)</sup>	—	0.1	10.8	—	10.9
Total Derivative Liabilities	<u>\$ —</u>	<u>\$ 2,650.7</u>	<u>\$ 10.8</u>	<u>\$ (1,717.6)</u>	<u>\$ 943.9</u>

*Note: Northern Trust has elected to net derivative assets and liabilities when legally enforceable master netting arrangements or similar agreements exist between Northern Trust and the counterparty. As of December 31, 2015, derivative assets and liabilities shown above also include reductions of \$322.8 million and \$440.2 million, respectively, as a result of cash collateral received from and deposited with derivative counterparties.*

<sup>(1)</sup> *This line includes a swap related to the sale of certain Visa Class B common shares and total return swap contracts.*

## Notes to Consolidated Financial Statements (unaudited) (continued)

The following tables present the changes in Level 3 assets and liabilities for the three and nine months ended September 30, 2016 and 2015.

**Table 32: Changes in Level 3 Assets**

<u>Level 3 Assets (In Millions)</u>	Auction Rate Securities	
	2016	2015
<b><u>Three Months Ended September 30,</u></b>		
Fair Value at July 1	\$ 6.1	\$ 16.6
Total Gains (Losses):		
Included in Earnings	—	—
Included in Other Comprehensive Income <sup>(1)</sup>	(0.1)	(0.4)
Purchases, Issues, Sales, and Settlements		
Sales	—	—
Settlements	(0.2)	—
Fair Value at September 30	\$ 5.8	\$ 16.2
<b><u>Nine Months Ended September 30,</u></b>		
Fair Value at January 1	\$ 17.1	\$ 18.1
Total Gains (Losses):		
Included in Earnings	—	—
Included in Other Comprehensive Income <sup>(1)</sup>	(0.7)	(0.2)
Purchases, Issues, Sales, and Settlements		
Sales	(10.1)	(1.2)
Settlements	(0.5)	(0.5)
Fair Value at September 30	\$ 5.8	\$ 16.2

<sup>(1)</sup> Unrealized gains (losses) are included in net unrealized gains (losses) on securities available for sale in the consolidated statements of comprehensive income.

**Table 33: Changes in Level 3 Liabilities**

<u>Level 3 Liabilities (In Millions)</u>	Swaps Related to Sale of Certain Visa Class B Common Shares	
	2016	2015
<b><u>Three Months Ended September 30,</u></b>		
Fair Value at July 1	\$ 28.7	\$ 11.3
Total (Gains) Losses:		
Included in Earnings <sup>(1)</sup>	2.3	0.2
Included in Other Comprehensive Income	—	—
Purchases, Issues, Sales, and Settlements		
Purchases	—	—
Settlements	(1.5)	(0.6)
Fair Value at September 30	\$ 29.5	\$ 10.9

**Notes to Consolidated Financial Statements (unaudited) (continued)**

<u>Nine Months Ended September 30,</u>	2016	2015
Fair Value at January 1	\$ 10.8	\$ —
Total (Gains) Losses:		
Included in Earnings <sup>(1)</sup>	6.9	0.2
Included in Other Comprehensive Income	—	—
Purchases, Issues, Sales, and Settlements		
Purchases	14.9	11.3
Settlements	(3.1)	(0.6)
Fair Value at September 30	<u>\$ 29.5</u>	<u>\$ 10.9</u>

<sup>(1)</sup> (Gains) losses are recorded in other operating income (expense) in the consolidated statements of income.

During the nine months ended September 30, 2016 and 2015, there were no transfers into or out of Level 3 assets or liabilities.

Carrying values of assets and liabilities that are not measured at fair value on a recurring basis may be adjusted to fair value in periods subsequent to their initial recognition, for example, to record an impairment of an asset. GAAP requires entities to disclose separately these subsequent fair value measurements and to classify them under the fair value hierarchy.

Assets measured at fair value on a nonrecurring basis at September 30, 2016 and 2015, all of which were categorized as Level 3 under the fair value hierarchy, were comprised of impaired loans whose values were based on real estate and other available collateral, and of other real estate owned (OREO) properties. Fair values of real-estate loan collateral were estimated using a market approach typically supported by third-party valuations and property-specific fees and taxes, and were subject to adjustments to reflect management's judgment as to realizable value. Other loan collateral, which typically consists of accounts receivable, inventory and equipment, is valued using a market approach adjusted for asset-specific characteristics and in limited instances third-party valuations are used. OREO assets are carried at the lower of cost or fair value less estimated costs to sell, with fair value typically based on third-party appraisals.

Collateral-based impaired loans and OREO assets that have been adjusted to fair value totaled \$6.7 million and \$1.8 million, respectively, at September 30, 2016, and \$10.9 million and \$0.3 million, respectively, at September 30, 2015. Assets measured at fair value on a nonrecurring basis reflect management's judgment as to realizable value.

The following table provides the fair value of, and the valuation technique, significant unobservable inputs and quantitative information used to develop the significant unobservable inputs for, Northern Trust's Level 3 assets that were measured at fair value on a nonrecurring basis as of September 30, 2016 and December 31, 2015.

**Table 34: Level 3 Nonrecurring Basis Significant Unobservable Inputs**

September 30, 2016				
<u>Financial Instrument</u>	Fair Value	Valuation Technique	Unobservable Input	Range of Discounts Applied
<b>Loans</b>	<b>\$6.7 million</b>	<b>Market Approach</b>	<b>Discount to reflect realizable value</b>	<b>15.0% - 25.0%</b>
<b>OREO</b>	<b>\$1.8 million</b>	<b>Market Approach</b>	<b>Discount to reflect realizable value</b>	<b>15.0% - 20.0%</b>
December 31, 2015				
<u>Financial Instrument</u>	Fair Value	Valuation Technique	Unobservable Input	Range of Discounts Applied
Loans	\$10.4 million	Market Approach	Discount to reflect realizable value	15.0% - 25.0%
OREO	\$3.6 million	Market Approach	Discount to reflect realizable value	15.0% - 20.0%

**Fair Value of Financial Instruments.** GAAP requires disclosure of the estimated fair value of certain financial instruments and the methods and significant assumptions used to estimate fair value. It excludes from this requirement nonfinancial assets and liabilities, as well as a wide range of franchise, relationship and intangible values that add value to Northern Trust. Accordingly,

## Notes to Consolidated Financial Statements (unaudited) (continued)

the required fair value disclosures provide only a partial estimate of the fair value of Northern Trust. Financial instruments recorded at fair value in Northern Trust's consolidated balance sheets are discussed above. The following methods and assumptions were used in estimating the fair values of financial instruments that are not carried at fair value.

*Held to Maturity Securities.* The fair values of held to maturity securities, excluding U.S. treasury securities, were obtained from external pricing vendors, or in limited cases internally, using widely accepted models which are based on an income approach (discounted cash flow) that incorporates current market yield curves. The fair values of U.S. treasury securities were determined using quoted, active market prices for identical securities.

*Loans (excluding lease receivables).* The fair value of the loan portfolio was estimated using an income approach (discounted cash flow) that incorporates current market rates offered by Northern Trust as of the date of the consolidated financial statements. The fair values of all loans were adjusted to reflect current assessments of loan collectability. Loans held for sale are recorded at the lower of cost or fair value.

*Federal Reserve and Federal Home Loan Bank Stock.* The fair values of Federal Reserve and Federal Home Loan Bank stock are equal to their carrying values which represent redemption value.

*Community Development Investments.* The fair values of these instruments were estimated using an income approach (discounted cash flow) that incorporates current market rates.

*Employee Benefit and Deferred Compensation.* These assets include U.S. Treasury securities and investments in mutual and collective trust funds held to fund certain supplemental employee benefit obligations and deferred compensation plans. Fair values of U.S. Treasury securities were determined using quoted, active market prices for identical securities. The fair values of investments in mutual and collective trust funds were valued at the funds' net asset values based on a market approach.

*Savings Certificates and Other Time Deposits.* The fair values of these instruments were estimated using an income approach (discounted cash flow) that incorporates market interest rates currently offered by Northern Trust for deposits with similar maturities.

*Senior Notes, Subordinated Debt, and Floating Rate Capital Debt.* Fair values were determined using a market approach based on quoted market prices, when available. If quoted market prices were not available, fair values were based on quoted market prices for comparable instruments.

*Federal Home Loan Bank Borrowings.* The fair values of these instruments were estimated using an income approach (discounted cash flow) that incorporates market interest rates available to Northern Trust.

*Loan Commitments.* The fair values of loan commitments represent the estimated costs to terminate or otherwise settle the obligations with a third party adjusted for any related allowance for credit losses.

*Standby Letters of Credit.* The fair values of standby letters of credit are measured as the amount of unamortized fees on these instruments, inclusive of the related allowance for credit losses. Fees are determined by applying basis points to the principal amounts of the letters of credit.

*Financial Instruments Valued at Carrying Value.* Due to their short maturity, the carrying values of certain financial instruments approximated their fair values. These financial instruments include: cash and due from banks; federal funds sold and securities purchased under agreements to resell; interest-bearing deposits with banks; Federal Reserve and other central bank deposits; client security settlement receivables; non-U.S. offices interest-bearing deposits; federal funds purchased; securities sold under agreements to repurchase; and other borrowings (includes term federal funds purchased and other short-term borrowings). The fair values of demand, noninterest-bearing, savings, and money market deposits represent the amounts payable on demand as of the reporting date, although such deposits are typically priced at a premium in banking industry consolidations.

## Notes to Consolidated Financial Statements (unaudited) (continued)

The following tables summarize the fair values of all financial instruments.

**Table 35: Fair Value of Financial Instruments**

(In Millions)	September 30, 2016				
	Book Value	Total Fair Value	Fair Value		
			Level 1	Level 2	Level 3
<b>Assets</b>					
Cash and Due from Banks	\$ 4,892.7	\$ 4,892.7	\$ 4,892.7	\$ —	\$ —
Federal Reserve and Other Central Bank Deposits	22,208.7	22,208.7	—	22,208.7	—
Interest-Bearing Deposits with Banks	5,855.8	5,855.8	—	5,855.8	—
Federal Funds Sold and Resell Agreements	2,066.0	2,066.0	—	2,066.0	—
Securities					
Available for Sale (Note)	35,973.6	35,973.6	7,663.9	28,303.9	5.8
Held to Maturity	8,716.0	8,733.1	8.0	8,725.1	—
Trading Account	0.8	0.8	—	0.8	—
Loans (excluding Leases)					
Held for Investment	32,924.7	33,229.9	—	—	33,229.9
Held for Sale	1.2	1.2	—	—	1.2
Client Security Settlement Receivables	1,984.5	1,984.5	—	1,984.5	—
Other Assets					
Federal Reserve and Federal Home Loan Bank Stock	158.1	158.1	—	158.1	—
Community Development Investments	195.6	202.1	—	202.1	—
Employee Benefit and Deferred Compensation	167.9	174.3	118.6	55.7	—
<b>Liabilities</b>					
<b>Deposits</b>					
Demand, Noninterest-Bearing, Savings and Money Market	\$ 43,939.3	\$ 43,939.3	\$ 43,939.3	\$ —	\$ —
Savings Certificates and Other Time	1,507.7	1,513.9	—	1,513.9	—
Non U.S. Offices Interest-Bearing	54,024.3	54,024.3	—	54,024.3	—
Federal Funds Purchased	378.5	378.5	—	378.5	—
Securities Sold under Agreements to Repurchase	301.8	301.8	—	301.8	—
Other Borrowings	4,002.4	4,001.6	—	4,001.6	—
Senior Notes	1,496.4	1,584.6	—	1,584.6	—
Long Term Debt (excluding Leases)					
Subordinated Debt	1,375.4	1,365.6	—	1,365.6	—
Floating Rate Capital Debt	277.4	239.2	—	239.2	—
Other Liabilities					
Standby Letters of Credit	39.1	39.1	—	—	39.1
Loan Commitments	45.1	45.1	—	—	45.1
<b>Derivative Instruments</b>					
<b>Asset/Liability Management</b>					
<b>Foreign Exchange Contracts</b>					
Assets	\$ 97.2	\$ 97.2	\$ —	\$ 97.2	\$ —
Liabilities	45.1	45.2	—	45.2	—
<b>Interest Rate Contracts</b>					
Assets	153.6	153.6	—	153.6	—
Liabilities	43.3	43.3	—	43.3	—
<b>Other Financial Derivatives</b>					
Liabilities <sup>(1)</sup>	29.5	29.5	—	—	29.5
<b>Client-Related and Trading</b>					
<b>Foreign Exchange Contracts</b>					
Assets	2,231.2	2,231.2	—	2,231.2	—
Liabilities	2,191.5	2,191.5	—	2,191.5	—
<b>Interest Rate Contracts</b>					
Assets	183.8	183.8	—	183.8	—
Liabilities	181.8	181.8	—	181.8	—

Note: Refer to the table located on page 40 for the disaggregation of available for sale securities.

<sup>(1)</sup> This line consists of swaps related to the sale of certain Visa Class B common shares.

**Notes to Consolidated Financial Statements (unaudited) (continued)**

(In Millions)

December 31, 2015

	Book Value	Total Fair Value	Fair Value		
			Level 1	Level 2	Level 3
<b>Assets</b>					
Cash and Due from Banks	\$ 6,418.5	\$ 6,418.5	\$ 6,418.5	\$ —	\$ —
Federal Reserve and Other Central Bank Deposits	23,695.5	23,695.5	—	23,695.5	—
Interest-Bearing Deposits with Banks	6,872.2	6,872.2	—	6,872.2	—
Federal Funds Sold and Resell Agreements	1,614.2	1,614.2	—	1,614.2	—
Securities					
Available for Sale ( <i>Note</i> )	32,317.9	32,317.9	6,178.3	26,122.5	17.1
Held to Maturity	5,248.3	5,227.5	26.0	5,201.5	—
Trading Account	1.2	1.2	—	1.2	—
Loans (excluding Leases)					
Held for Investment	32,432.7	32,596.5	—	—	32,596.5
Held for Sale	12.0	12.0	—	—	12.0
Client Security Settlement Receivables	2,157.0	2,157.0	—	2,157.0	—
Other Assets					
Federal Reserve and Federal Home Loan Bank Stock	253.1	253.1	—	253.1	—
Community Development Investments	173.5	177.1	—	177.1	—
Employee Benefit and Deferred Compensation	155.3	153.4	104.2	49.2	—
<b>Liabilities</b>					
Deposits					
Demand, Noninterest-Bearing, Savings and Money Market	\$ 45,191.3	\$ 45,191.3	\$ 45,191.3	\$ —	\$ —
Savings Certificates and Other Time	1,455.8	1,463.5	—	1,463.5	—
Non U.S. Offices Interest-Bearing	50,221.8	50,221.8	—	50,221.8	—
Federal Funds Purchased	351.5	351.5	—	351.5	—
Securities Sold under Agreements to Repurchase	546.6	546.6	—	546.6	—
Other Borrowings	4,055.1	4,055.7	—	4,055.7	—
Senior Notes	1,497.4	1,531.8	—	1,531.8	—
Long Term Debt (excluding Leases)					
Subordinated Debt	1,341.6	1,332.2	—	1,332.2	—
Floating Rate Capital Debt	277.3	236.6	—	236.6	—
Other Liabilities					
Standby Letters of Credit	46.6	46.6	—	—	46.6
Loan Commitments	48.9	48.9	—	—	48.9
<b>Derivative Instruments</b>					
Asset/Liability Management					
Foreign Exchange Contracts					
Assets	\$ 81.6	\$ 81.6	\$ —	\$ 81.6	\$ —
Liabilities	19.0	19.0	—	19.0	—
Interest Rate Contracts					
Assets	117.4	117.4	—	117.4	—
Liabilities	22.7	22.7	—	22.7	—
Other Financial Derivatives					
Liabilities <sup>(1)</sup>	10.9	10.9	—	0.1	10.8
Client-Related and Trading					
Foreign Exchange Contracts					
Assets	2,541.8	2,541.8	—	2,541.8	—
Liabilities	2,500.4	2,500.4	—	2,500.4	—
Interest Rate Contracts					
Assets	111.1	111.1	—	111.1	—
Liabilities	108.5	108.5	—	108.5	—

Note: Refer to the table located on page 41 for the disaggregation of available for sale securities.

<sup>(1)</sup> This line consists of a swap related to the sale of certain Visa Class B common shares and total return swaps.



**Notes to Consolidated Financial Statements (unaudited) (continued)**

**4. Securities** — The following tables provide the amortized cost and fair values of securities at September 30, 2016 and December 31, 2015.

**Table 36: Reconciliation of Amortized Cost to Fair Value of Securities Available for Sale**

<u>Securities Available for Sale</u>	September 30, 2016			
	Amortized Cost	Gross Unrealized		Fair Value
		Gains	Losses	
<u>(In Millions)</u>				
U.S. Government	\$ 7,610.1	\$ 54.7	\$ 0.9	\$ 7,663.9
Obligations of States and Political Subdivisions	776.4	0.5	2.1	774.8
Government Sponsored Agency	17,978.4	68.9	22.9	18,024.4
Non-U.S. Government	419.9	0.2	—	420.1
Corporate Debt	3,912.6	8.7	12.9	3,908.4
Covered Bonds	1,243.4	2.1	1.0	1,244.5
Sub-Sovereign, Supranational and Non-U.S. Agency Bonds	1,169.6	2.1	1.7	1,170.0
Other Asset-Backed	2,248.9	5.4	0.2	2,254.1
Auction Rate	6.1	—	0.3	5.8
Commercial Mortgage-Backed	447.5	1.3	0.1	448.7
Other	58.9	—	—	58.9
<b>Total</b>	<b>\$ 35,871.8</b>	<b>\$ 143.9</b>	<b>\$ 42.1</b>	<b>\$ 35,973.6</b>
<u>Securities Available for Sale</u>	December 31, 2015			
	Amortized Cost	Gross Unrealized		Fair Value
		Gains	Losses	
<u>(In Millions)</u>				
U.S. Government	\$ 6,180.4	\$ 3.4	\$ 5.5	\$ 6,178.3
Obligations of States and Political Subdivisions	36.4	0.1	0.1	36.4
Government Sponsored Agency	16,370.5	42.8	46.5	16,366.8
Non-U.S. Government	309.5	0.1	0.1	309.5
Corporate Debt	3,744.4	0.9	33.1	3,712.2
Covered Bonds	1,873.3	1.8	4.9	1,870.2
Sub-Sovereign, Supranational and Non-U.S. Agency Bonds	860.9	0.5	2.0	859.4
Other Asset-Backed	2,504.2	0.1	4.2	2,500.1
Auction Rate	16.7	0.5	0.1	17.1
Commercial Mortgage-Backed	378.1	—	3.7	374.4
Other	93.4	0.1	—	93.5
<b>Total</b>	<b>\$ 32,367.8</b>	<b>\$ 50.3</b>	<b>\$ 100.2</b>	<b>\$ 32,317.9</b>

Notes to Consolidated Financial Statements (unaudited) (continued)

**Table 37: Reconciliation of Amortized Cost to Fair Value of Securities Held to Maturity**

<u>Securities Held to Maturity</u>	September 30, 2016			
	Amortized Cost	Gross Unrealized		Fair Value
		Gains	Losses	
<u>(In Millions)</u>				
U.S Government	\$ 8.0	\$ —	\$ —	\$ 8.0
Obligations of States and Political Subdivisions	76.6	3.7	—	80.3
Government Sponsored Agency	8.1	0.6	—	8.7
Corporate Debt	149.3	0.4	—	149.7
Covered Bonds	1,860.7	16.9	1.1	1,876.5
Non-U.S. Government	3,468.4	13.5	0.1	3,481.8
Certificates of Deposit	750.4	0.1	0.1	750.4
Sub-Sovereign, Supranational and Non-U.S. Agency Bonds	2,282.9	13.8	0.2	2,296.5
Other	111.6	0.1	30.5	81.2
<b>Total</b>	<b>\$ 8,716.0</b>	<b>\$ 49.1</b>	<b>\$ 32.0</b>	<b>\$ 8,733.1</b>
 <u>Securities Held to Maturity</u>				
	December 31, 2015			
	Amortized Cost	Gross Unrealized		Fair Value
		Gains	Losses	
<u>(In Millions)</u>				
U.S Government	\$ 26.0	\$ —	\$ —	\$ 26.0
Obligations of States and Political Subdivisions	89.2	5.2	—	94.4
Government Sponsored Agency	9.9	0.7	—	10.6
Covered Bonds	892.4	0.4	1.9	890.9
Non-U.S. Government	1,118.0	4.8	0.5	1,122.3
Certificates of Deposit	691.6	0.1	0.1	691.6
Sub-Sovereign, Supranational and Non-U.S. Agency Bonds	2,326.2	8.3	0.9	2,333.6
Other	95.0	—	36.9	58.1
<b>Total</b>	<b>\$ 5,248.3</b>	<b>\$ 19.5</b>	<b>\$ 40.3</b>	<b>\$ 5,227.5</b>

Securities held to maturity consist of debt securities that management intends to, and Northern Trust has the ability to, hold until maturity.

**Notes to Consolidated Financial Statements (unaudited) (continued)**

The following table provides the remaining maturity of securities as of September 30, 2016.

**Table 38: Remaining Maturity of Securities Available for Sale and Held to Maturity**

(In Millions)	September 30, 2016	
	Amortized Cost	Fair Value
Available for Sale		
Due in One Year or Less	\$ 9,294.5	\$ 9,313.6
Due After One Year Through Five Years	20,249.7	20,328.0
Due After Five Years Through Ten Years	5,450.1	5,456.2
Due After Ten Years	877.5	875.8
Total	<u>35,871.8</u>	<u>35,973.6</u>
Held to Maturity		
Due in One Year or Less	3,722.5	3,727.8
Due After One Year Through Five Years	4,863.2	4,901.5
Due After Five Years Through Ten Years	71.8	69.7
Due After Ten Years	58.5	34.1
Total	<u>\$ 8,716.0</u>	<u>\$ 8,733.1</u>

*Note: Mortgage-backed and asset-backed securities are included in the above table taking into account anticipated future prepayments.*

**Investment Security Gains / Losses.** Net investment security gains of \$0.2 million were recognized in the three months ended September 30, 2016. There were no net investment security gains or losses recognized in the three months ended September 30, 2015. Gross proceeds from the sale of securities during the three months ended September 30, 2016 and 2015 were \$217.2 million and \$3.8 million, respectively.

There were \$1.9 million of net investment security losses recognized in the nine months ended September 30, 2016, which include \$2.4 million of charges related to the other-than-temporary impairment (OTTI) of certain Community Reinvestment Act (CRA) eligible held to maturity securities. Net investment security losses of \$0.3 million were recognized in the nine months ended September 30, 2015. For the nine months ended September 30, 2016, proceeds of \$740.8 million were received from the sale of securities, resulting in gross realized gains of \$0.5 million. For the nine months ended September 30, 2015, proceeds of \$110.3 million were received from the sale of securities, resulting in gross realized gains and losses of \$0.1 million and \$0.4 million, respectively.

## Notes to Consolidated Financial Statements (unaudited) (continued)

**Securities with Unrealized Losses.** The following tables provide information regarding securities that had been in a continuous unrealized loss position for less than twelve months and for twelve months or longer as of September 30, 2016 and December 31, 2015.

**Table 39: Securities with Unrealized Losses**

Securities with Unrealized Losses as of September 30, 2016	Less than 12 Months		12 Months or Longer		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
<i>(In Millions)</i>						
U.S. Government	\$ 1,101.6	\$ 0.9	\$ —	\$ —	\$ 1,101.6	\$ 0.9
Obligations of States and Political Subdivisions	631.8	2.1	—	—	631.8	2.1
Government Sponsored Agency	4,437.8	12.8	2,615.3	10.1	7,053.1	22.9
Non-U.S. Government	1,102.2	0.1	—	—	1,102.2	0.1
Corporate Debt	755.2	1.5	1,118.8	11.4	1,874.0	12.9
Covered Bonds	280.4	1.0	331.5	1.1	611.9	2.1
Sub-Sovereign, Supranational and Non-U.S. Agency Bonds	570.3	0.8	248.9	1.1	819.2	1.9
Other Asset-Backed	—	—	93.2	0.2	93.2	0.2
Certificates of Deposit	345.8	0.1	—	—	345.8	0.1
Auction Rate	—	—	5.3	0.3	5.3	0.3
Commercial Mortgage-Backed	30.8	0.1	—	—	30.8	0.1
Other	24.1	7.4	71.3	23.1	95.4	30.5
<b>Total</b>	<b>\$ 9,280.0</b>	<b>\$ 26.8</b>	<b>\$ 4,484.3</b>	<b>\$ 47.3</b>	<b>\$ 13,764.3</b>	<b>\$ 74.1</b>
Securities with Unrealized Losses as of December 31, 2015						
<i>(In Millions)</i>						
U.S. Government	\$ 3,888.0	\$ 5.5	\$ —	\$ —	\$ 3,888.0	\$ 5.5
Obligations of States and Political Subdivisions	15.1	0.1	—	—	15.1	0.1
Government Sponsored Agency	9,208.5	38.7	1,213.6	7.8	10,422.1	46.5
Non-U.S. Government	314.3	0.6	—	—	314.3	0.6
Corporate Debt	2,067.6	10.3	1,057.1	22.8	3,124.7	33.1
Covered Bonds	1,598.4	6.7	10.0	0.1	1,608.4	6.8
Sub-Sovereign, Supranational and Non-U.S. Agency Bonds	1,132.9	2.3	109.3	0.6	1,242.2	2.9
Other Asset-Backed	2,122.7	4.0	170.6	0.2	2,293.3	4.2
Certificates of Deposit	180.3	0.1	—	—	180.3	0.1
Auction Rate	—	—	6.4	0.1	6.4	0.1
Commercial Mortgage-Backed	374.4	3.7	—	—	374.4	3.7
Other	28.7	13.3	50.7	23.6	79.4	36.9
<b>Total</b>	<b>\$ 20,930.9</b>	<b>\$ 85.3</b>	<b>\$ 2,617.7</b>	<b>\$ 55.2</b>	<b>\$ 23,548.6</b>	<b>\$ 140.5</b>

As of September 30, 2016, 762 securities with a combined fair value of \$13.8 billion were in an unrealized loss position, with their unrealized losses totaling \$74.1 million. Unrealized losses of \$22.9 million related to government sponsored agency securities were primarily attributable to higher market interest rates since purchase. Unrealized losses of \$12.9 million within corporate debt securities primarily reflected higher market rates and wider credit spreads since purchase; 31% of the corporate debt portfolio is backed by guarantees provided by U.S. and non-U.S. governmental entities.

The majority of the \$30.5 million of unrealized losses in securities classified as “other” at September 30, 2016, related to securities primarily purchased at a premium or par by Northern Trust for compliance with the CRA. Unrealized losses on these CRA-related securities were attributable to yields that were below market rates for the purpose of supporting institutions and programs that benefit low- to moderate- income communities within Northern Trust’s market area. Unrealized losses of \$0.3 million related to

## Notes to Consolidated Financial Statements (unaudited) (continued)

auction rate securities primarily reflected reduced market liquidity as a majority of auctions continued to fail, preventing holders from liquidating their investments at par. The remaining unrealized losses on Northern Trust's securities portfolio as of September 30, 2016, were attributable to changes in overall market interest rates, increased credit spreads or reduced market liquidity. As of September 30, 2016, Northern Trust did not intend to sell any investment in an unrealized loss position and it was not more likely than not that Northern Trust would be required to sell any such investment before the recovery of its amortized cost basis, which may be maturity.

Security impairment reviews are conducted quarterly to identify and evaluate securities that have indications of possible OTTI. A determination as to whether a security's decline in market value is other-than-temporary takes into consideration numerous factors and the relative significance of any single factor can vary by security. Factors Northern Trust considers in determining whether impairment is other-than-temporary include, but are not limited to: the length of time the security has been impaired; the severity of the impairment; the cause of the impairment and the financial condition and near-term prospects of the issuer; activity in the market of the issuer, which may indicate adverse credit conditions; Northern Trust's intent regarding the sale of the security as of the balance sheet date; and the likelihood that it will not be required to sell the security for a period of time sufficient to allow for the recovery of the security's amortized cost basis. For each security meeting the requirements of Northern Trust's internal screening process, an extensive review is conducted to determine if OTTI has occurred.

While all securities are considered, the process for identifying credit impairment within CRA-eligible mortgage-backed securities incorporates an expected loss approach using discounted cash flows on the underlying collateral pools. To evaluate whether an unrealized loss on CRA-eligible mortgage-backed securities is other-than-temporary, a calculation of the security's present value is made using current pool data, the current delinquency pipeline, default rates and loan loss severities based on the historical performance of the mortgage pools, and Northern Trust's outlook for the housing market and the overall economy. If the present value of the collateral pools was found to be less than the current amortized cost of the security, a credit-related OTTI loss would be recorded in earnings equal to the difference between the two amounts.

Impairments of CRA-eligible mortgage-backed securities are influenced by a number of factors, including but not limited to, U.S. economic and housing market performance, pool credit enhancement level, year of origination and estimated credit quality of the collateral. The factors used in estimating losses related to CRA-eligible mortgage-backed securities vary by vintage of loan origination and collateral quality. There were no OTTI losses recognized during the three months ended September 30, 2016. There were \$2.4 million of OTTI losses recognized in the nine months ended September 30, 2016 related to CRA-eligible mortgage-backed securities. There were no OTTI losses recognized during the three and nine months ended September 30, 2015.

**Credit Losses on Debt Securities.** The table below provides the cumulative credit-related losses recognized in earnings on debt securities other-than-temporarily impaired.

**Table 40: Cumulative Credit-Related Losses on Securities**

(In Millions)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Cumulative Credit-Related Losses on Securities Held — Beginning of Period	\$ 7.6	\$ 5.2	\$ 5.2	\$ 5.2
Plus: Losses on Newly Identified Impairments	—	—	0.3	—
Additional Losses on Previously Identified Impairments	—	—	2.1	—
Less: Current and Prior Period Losses on Securities Sold During the Period	—	—	—	—
Cumulative Credit-Related Losses on Securities Held — End of Period	\$ 7.6	\$ 5.2	\$ 7.6	\$ 5.2

**5. Securities Sold Under Agreements to Repurchase** — Securities sold under agreements to repurchase are accounted for as collateralized financings and recorded at the amounts at which the securities were sold plus accrued interest. To minimize any potential credit risk associated with these transactions, the fair value of the securities sold is monitored, limits are set on exposure with counterparties, and the financial condition of counterparties is regularly assessed. Securities sold under agreements to repurchase are held by the counterparty until the repurchase.

## Notes to Consolidated Financial Statements (unaudited) (continued)

The following table provides information regarding repurchase agreements that are accounted for as secured borrowings as of September 30, 2016.

**Table 41: Repurchase Agreements Accounted for as Secured Borrowings**

(In Millions)	September 30, 2016	
	Remaining Contractual Maturity of the Agreements	
Repurchase Agreements	Overnight and Continuous	
U.S. Treasury and Agency Securities	\$	301.8
Total Borrowings	\$	301.8
Gross Amount of Recognized Liabilities for Repurchase Agreements in Note 21	\$	301.8
Amounts related to agreements not included in Note 21	\$	—

**6. Loans and Leases** — Amounts outstanding for loans and leases, by segment and class, are shown below.

**Table 42: Loans and Leases**

(In Millions)	September 30, 2016	December 31, 2015
Commercial		
Commercial and Institutional	\$ 9,422.5	\$ 9,431.5
Commercial Real Estate	4,039.2	3,848.8
Lease Financing, net	306.5	544.4
Non-U.S.	1,404.6	1,137.7
Other	405.1	194.1
Total Commercial	15,577.9	15,156.5
Personal		
Residential Real Estate	7,994.3	8,850.7
Private Client	9,799.6	9,136.4
Other	51.2	37.3
Total Personal	17,845.1	18,024.4
Total Loans and Leases	33,423.0	33,180.9
Allowance for Credit Losses Assigned to Loans and Leases	(191.0)	(193.8)
Net Loans and Leases	\$ 33,232.0	\$ 32,987.1

Residential real estate loans consist of traditional first lien mortgages and equity credit lines that generally require a loan-to-collateral value of no more than 65% to 75% at inception. Northern Trust's equity credit line products generally have draw periods of up to 10 years and a balloon payment of any outstanding balance is due at maturity. Payments are interest only with variable interest rates. Northern Trust does not offer equity credit lines that include an option to convert the outstanding balance to an amortizing payment loan. As of September 30, 2016 and December 31, 2015, equity credit lines totaled \$1.3 billion and \$1.5 billion, respectively, and equity credit lines for which first liens were held by Northern Trust represented 90% and 89% of the total equity credit lines as of September 30, 2016 and December 31, 2015, respectively.

Included within the non-U.S., commercial-other and personal-other classes are short-duration advances primarily related to the processing of custodied client investments that totaled \$1.2 billion at September 30, 2016, and \$719.5 million at December 31, 2015. Demand deposits reclassified as loan balances totaled \$31.6 million and \$75.4 million at September 30, 2016 and December 31, 2015, respectively. Loans and leases classified as held for sale totaled \$1.2 million and \$53.0 million at September 30, 2016, respectively, and totaled \$12.0 million and \$112.3 million, at December 31, 2015, respectively, primarily related to the decision to exit a non-strategic loan and lease portfolio.

**Credit Quality Indicators.** Credit quality indicators are statistics, measurements or other metrics that provide information regarding the relative credit risk of loans and leases. Northern Trust utilizes a variety of credit quality indicators to assess the credit risk of loans and leases at the segment, class and individual credit exposure levels.

## Notes to Consolidated Financial Statements (unaudited) (continued)

As part of its credit process, Northern Trust utilizes an internal borrower risk rating system to support identification, approval and monitoring of credit risk. Borrower risk ratings are used in credit underwriting, management reporting and the calculation of credit loss allowances and economic capital.

Risk ratings are used for ranking the credit risk of borrowers and the probability of their default. Each borrower is rated using one of a number of ratings models or other subjective assessment methodologies, which consider both quantitative and qualitative factors. The ratings models vary among classes of loans and leases in order to capture the unique risk characteristics inherent within each particular type of credit exposure. Provided below are the more significant performance indicator attributes considered within Northern Trust's borrower rating models, by loan and lease class.

- Commercial and Institutional: leverage, profit margin, liquidity, asset size and capital levels;
- Commercial Real Estate: debt service coverage, loan-to-value ratio, leasing status and guarantor support;
- Lease Financing and Commercial-Other: leverage, profit margin, liquidity, asset size and capital levels;
- Non-U.S.: leverage, profit margin, liquidity, return on assets and capital levels;
- Residential Real Estate: payment history, credit bureau scores and loan-to-value ratio;
- Private Client: cash-flow-to-debt and net worth ratios, leverage and liquidity; and
- Personal-Other: cash-flow-to-debt and net worth ratios.

While the criteria vary by model, the objective is for the borrower ratings to be consistent in both the measurement and ranking of risk. Each model is calibrated to a master rating scale to support this consistency. Ratings for borrowers not in default range from "1" for the strongest credits to "7" for the weakest non-defaulted credits. Ratings of "8" or "9" are used for defaulted borrowers. Borrower risk ratings are monitored and are revised when events or circumstances indicate a change is required. Risk ratings are validated at least annually.

Loan and lease segment and class balances as of September 30, 2016 and December 31, 2015 are provided below, segregated by borrower ratings into "1 to 3," "4 to 5" and "6 to 9" (watch list), categories.

**Table 43: Borrower Ratings**

(In Millions)	September 30, 2016				December 31, 2015			
	1 to 3 Category	4 to 5 Category	6 to 9 Category (Watch List)	Total	1 to 3 Category	4 to 5 Category	6 to 9 Category (Watch List)	Total
<b>Commercial</b>								
Commercial and Institutional	\$ 6,408.2	\$ 2,866.7	\$ 147.6	\$ 9,422.5	\$ 6,360.6	\$ 2,897.2	\$ 173.7	\$ 9,431.5
Commercial Real Estate	2,013.0	1,984.0	42.2	4,039.2	1,822.6	1,992.7	33.5	3,848.8
Lease Financing, net	227.0	79.5	—	306.5	377.0	133.1	34.3	544.4
Non-U.S.	300.0	1,090.1	14.5	1,404.6	313.8	823.3	0.6	1,137.7
Other	194.9	210.2	—	405.1	94.9	99.2	—	194.1
<b>Total Commercial</b>	<b>9,143.1</b>	<b>6,230.5</b>	<b>204.3</b>	<b>15,577.9</b>	<b>8,968.9</b>	<b>5,945.5</b>	<b>242.1</b>	<b>15,156.5</b>
<b>Personal</b>								
Residential Real Estate	2,684.6	5,009.4	300.3	7,994.3	3,014.9	5,516.7	319.1	8,850.7
Private Client	6,314.2	3,459.5	25.9	9,799.6	5,908.3	3,207.1	21.0	9,136.4
Other	24.7	26.5	—	51.2	18.3	19.0	—	37.3
<b>Total Personal</b>	<b>9,023.5</b>	<b>8,495.4</b>	<b>326.2</b>	<b>17,845.1</b>	<b>8,941.5</b>	<b>8,742.8</b>	<b>340.1</b>	<b>18,024.4</b>
<b>Total Loans and Leases</b>	<b>\$ 18,166.6</b>	<b>\$ 14,725.9</b>	<b>\$ 530.5</b>	<b>\$ 33,423.0</b>	<b>\$ 17,910.4</b>	<b>\$ 14,688.3</b>	<b>\$ 582.2</b>	<b>\$ 33,180.9</b>

Loans and leases in the "1 to 3" category are expected to exhibit minimal to modest probabilities of default and are characterized by borrowers having the strongest financial qualities, including above average financial flexibility, cash flows and capital levels. Borrowers assigned these ratings are anticipated to experience very little to moderate financial pressure in adverse down cycle scenarios. As a result of these characteristics, borrowers within this category exhibit a minimal to modest likelihood of loss.

## Notes to Consolidated Financial Statements (unaudited) (continued)

Loans and leases in the “4 to 5” category are expected to exhibit moderate to acceptable probabilities of default and are characterized by borrowers with less financial flexibility than those in the “1 to 3” category. Cash flows and capital levels are generally sufficient to allow for borrowers to meet current requirements, but have reduced cushion in adverse down cycle scenarios. As a result of these characteristics, borrowers within this category exhibit a moderate likelihood of loss.

Loans and leases in the watch list category have elevated credit risk profiles that are monitored through internal watch lists, and consist of credits with borrower ratings of “6 to 9.” These credits, which include all nonperforming credits, are expected to exhibit minimally acceptable probabilities of default, elevated risk of default, or are currently in default. Borrowers associated with these risk profiles that are not currently in default have limited financial flexibility. Cash flows and capital levels range from acceptable to potentially insufficient to meet current requirements, particularly in adverse down cycle scenarios. As a result of these characteristics, borrowers in this category exhibit an elevated likelihood of loss.

**Recognition of Income.** Interest income on loans is recorded on an accrual basis unless, in the opinion of management, there is a question as to the ability of the debtor to meet the terms of the loan agreement, or interest or principal is more than 90 days contractually past due and the loan is not well-secured and in the process of collection. Loans meeting such criteria are classified as nonperforming and interest income is recorded on a cash basis. At the time a loan is determined to be nonperforming, interest accrued but not collected is reversed against interest income in the current period. Interest collected on nonperforming loans is applied to principal unless, in the opinion of management, collectability of principal is not in doubt. Management’s assessment of the indicators of loan and lease collectability, and its policies relative to the recognition of interest income, including the suspension and subsequent resumption of income recognition, do not meaningfully vary between loan and lease classes. Nonperforming loans are returned to performing status when factors indicating doubtful collectability no longer exist. Factors considered in returning a loan to performing status are consistent across all classes of loans and leases and, in accordance with regulatory guidance, relate primarily to expected payment performance. Loans are eligible to be returned to performing status when: (i) no principal or interest that is due is unpaid and repayment of the remaining contractual principal and interest is expected or (ii) the loan has otherwise become well-secured (possessing realizable value sufficient to discharge the debt, including accrued interest, in full) and is in the process of collection (through action reasonably expected to result in debt repayment or restoration to a current status in the near future). A loan that has not been brought fully current may be restored to performing status provided there has been a sustained period of repayment performance (generally a minimum of six months) by the borrower in accordance with the contractual terms, and Northern Trust is reasonably assured of repayment within a reasonable period of time. Additionally, a loan that has been formally restructured so as to be reasonably assured of repayment and performance according to its modified terms may be returned to accrual status, provided there was a well-documented credit evaluation of the borrower’s financial condition and prospects of repayment under the revised terms and there has been a sustained period of repayment performance (generally a minimum of six months) under the revised terms.



## Notes to Consolidated Financial Statements (unaudited) (continued)

Past due status is based on how long since the contractual due date a principal or interest payment has been past due. For disclosure purposes, loans that are 29 days past due or less are reported as current. The following tables provide balances and delinquency status of performing and nonperforming loans and leases by segment and class, as well as the total OREO and nonperforming asset balances, as of September 30, 2016 and December 31, 2015.

**Table 44: Delinquency Status**

September 30, 2016

(In Millions)	Current	30-59 Days Past Due	60-89 Days Past Due	90 Days or More Past Due	Total Performing	Nonperforming	Total Loans and Leases
<b>Commercial</b>							
Commercial and Institutional	\$ 9,338.9	\$ 16.1	\$ 1.7	\$ 4.5	\$ 9,361.2	\$ 61.3	\$ 9,422.5
Commercial Real Estate	4,006.3	13.5	5.5	2.1	4,027.4	11.8	4,039.2
Lease Financing, net	306.5	—	—	—	306.5	—	306.5
Non-U.S.	1,403.7	—	0.9	—	1,404.6	—	1,404.6
Other	405.1	—	—	—	405.1	—	405.1
<b>Total Commercial</b>	<b>15,460.5</b>	<b>29.6</b>	<b>8.1</b>	<b>6.6</b>	<b>15,504.8</b>	<b>73.1</b>	<b>15,577.9</b>
<b>Personal</b>							
Residential Real Estate	7,876.0	10.7	6.3	3.3	7,896.3	98.0	7,994.3
Private Client	9,768.7	20.0	6.1	2.6	9,797.4	2.2	9,799.6
Other	51.2	—	—	—	51.2	—	51.2
<b>Total Personal</b>	<b>17,695.9</b>	<b>30.7</b>	<b>12.4</b>	<b>5.9</b>	<b>17,744.9</b>	<b>100.2</b>	<b>17,845.1</b>
<b>Total Loans and Leases</b>	<b>\$ 33,156.4</b>	<b>\$ 60.3</b>	<b>\$ 20.5</b>	<b>\$ 12.5</b>	<b>\$ 33,249.7</b>	<b>\$ 173.3</b>	<b>\$ 33,423.0</b>
				Other Real Estate Owned		7.7	
				<b>Total Nonperforming Assets</b>		<b>\$ 181.0</b>	

December 31, 2015

(In Millions)	Current	30-59 Days Past Due	60-89 Days Past Due	90 Days or More Past Due	Total Performing	Nonperforming	Total Loans and Leases
<b>Commercial</b>							
Commercial and Institutional	\$ 9,377.6	\$ 7.8	\$ 0.9	\$ 2.3	\$ 9,388.6	\$ 42.9	\$ 9,431.5
Commercial Real Estate	3,823.3	2.4	4.9	1.5	3,832.1	16.7	3,848.8
Lease Financing, net	544.4	—	—	—	544.4	—	544.4
Non-U.S.	1,137.7	—	—	—	1,137.7	—	1,137.7
Other	194.1	—	—	—	194.1	—	194.1
<b>Total Commercial</b>	<b>15,077.1</b>	<b>10.2</b>	<b>5.8</b>	<b>3.8</b>	<b>15,096.9</b>	<b>59.6</b>	<b>15,156.5</b>
<b>Personal</b>							
Residential Real Estate	8,679.3	35.2	14.5	1.6	8,730.6	120.1	8,850.7
Private Client	9,104.8	17.5	12.0	1.7	9,136.0	0.4	9,136.4
Other	37.3	—	—	—	37.3	—	37.3
<b>Total Personal</b>	<b>17,821.4</b>	<b>52.7</b>	<b>26.5</b>	<b>3.3</b>	<b>17,903.9</b>	<b>120.5</b>	<b>18,024.4</b>
<b>Total Loans and Leases</b>	<b>\$ 32,898.5</b>	<b>\$ 62.9</b>	<b>\$ 32.3</b>	<b>\$ 7.1</b>	<b>\$ 33,000.8</b>	<b>\$ 180.1</b>	<b>\$ 33,180.9</b>
				Other Real Estate Owned		8.2	
				<b>Total Nonperforming Assets</b>		<b>\$ 188.3</b>	

**Impaired Loans.** A loan is considered to be impaired when, based on current information and events, management determines that it is probable that Northern Trust will be unable to collect all amounts due according to the contractual terms of the loan agreement. Impaired loans are identified through ongoing credit management and risk rating processes, including the formal review of past due and watch list credits. Payment performance and delinquency status are critical factors in identifying impairment for all loans and leases, particularly those within the residential real estate, private client and personal-other classes. Other key factors considered in identifying impairment of loans and leases within the commercial and institutional, non-U.S., lease financing and commercial-other classes relate to the borrower's ability to perform under the terms of the obligation as measured through the

## Notes to Consolidated Financial Statements (unaudited) (continued)

assessment of future cash flows, including consideration of collateral value, market value and other factors. A loan is also considered to be impaired if its terms have been modified as a concession resulting from the debtor's financial difficulties, referred to as a troubled debt restructuring (TDR) and discussed in further detail below. Impairment is measured based upon the loan's market price, the present value of expected future cash flows, discounted at the loan's effective interest rate, or the fair value of the collateral if the loan is collateral dependent. If the loan valuation is less than the recorded value of the loan, based on the certainty of loss, either a specific allowance is established or a charge-off is recorded for the difference. Smaller balance (individually less than \$1 million) homogeneous loans are collectively evaluated for impairment and excluded from impaired loan disclosures as allowed under applicable accounting standards. Northern Trust's accounting policies for impaired loans are consistent across all classes of loans and leases.

**Notes to Consolidated Financial Statements (unaudited) (continued)**

The following tables provide information related to impaired loans by segment and class.

**Table 45: Information about Impaired Loans as of the Period End**

(In Millions)	As of September 30, 2016			As of December 31, 2015		
	Recorded Investment	Unpaid Principal Balance	Specific Allowance	Recorded Investment	Unpaid Principal Balance	Specific Allowance
<b>With No Related Specific Allowance</b>						
Commercial and Institutional	\$ 46.0	\$ 48.9	\$ —	\$ 27.1	\$ 30.7	\$ —
Commercial Real Estate	16.5	20.1	—	17.2	21.2	—
Lease Financing, net	—	—	—	—	—	—
Residential Real Estate	92.7	130.4	—	99.3	140.7	—
Private Client	2.2	2.3	—	0.2	0.2	—
<b>With a Related Specific Allowance</b>						
Commercial and Institutional	12.2	15.6	7.8	9.3	11.4	1.6
Commercial Real Estate	—	—	—	—	1.4	—
Lease Financing, net	0.8	0.8	0.8	2.7	2.7	1.4
Residential Real Estate	2.8	2.9	0.5	1.5	1.5	0.1
Private Client	—	—	—	—	—	—
<b>Total</b>						
Commercial	75.5	85.4	8.6	56.3	67.4	3.0
Personal	97.7	135.6	0.5	101.0	142.4	0.1
<b>Total</b>	<b>\$ 173.2</b>	<b>\$ 221.0</b>	<b>\$ 9.1</b>	<b>\$ 157.3</b>	<b>\$ 209.8</b>	<b>\$ 3.1</b>

(In Millions)	Three Months Ended September 30,				Nine Months Ended September 30,			
	2016		2015		2016		2015	
	Average Recorded Investment	Interest Income Recognized	Average Recorded Investment	Interest Income Recognized	Average Recorded Investment	Interest Income Recognized	Average Recorded Investment	Interest Income Recognized
<b>With No Related Specific Allowance</b>								
Commercial and Institutional	\$ 35.2	\$ —	\$ 9.4	\$ —	\$ 30.7	\$ —	\$ 8.9	\$ —
Commercial Real Estate	17.5	0.2	25.1	—	17.4	0.3	35.8	0.4
Lease Financing, net	—	—	—	—	0.6	0.1	1.1	0.1
Residential Real Estate	92.1	0.4	154.0	0.5	96.4	1.4	157.0	1.3
Private Client	2.3	—	0.2	—	1.3	—	0.4	—
<b>With a Related Specific Allowance</b>								
Commercial and Institutional	6.7	—	6.4	—	7.2	—	9.0	—
Commercial Real Estate	—	—	5.1	—	—	—	9.1	—
Lease Financing, net	1.4	—	2.8	—	1.4	—	2.0	—
Residential Real Estate	1.6	—	6.6	—	1.5	—	5.4	—
Private Client	—	—	0.2	—	—	—	0.6	—
<b>Total</b>								
Commercial	60.8	0.2	48.8	—	57.3	0.4	66.0	0.5
Personal	96.0	0.4	161.0	0.5	99.2	1.4	163.4	1.3
<b>Total</b>	<b>\$ 156.8</b>	<b>\$ 0.6</b>	<b>\$ 209.8</b>	<b>\$ 0.5</b>	<b>\$ 156.5</b>	<b>\$ 1.8</b>	<b>\$ 229.4</b>	<b>\$ 1.8</b>

*Note: Average recorded investment in impaired loans is calculated as the average of the month-end impaired loan balances for the period.*

Interest income that would have been recorded for nonperforming loans in accordance with their original terms was \$2.1 million and \$2.0 million, respectively, for the three months ended September 30, 2016 and 2015, and \$6.3 million and \$4.1 million, respectively, for the nine months ended September 30, 2016 and 2015.

## Notes to Consolidated Financial Statements (unaudited) (continued)

There were \$3.3 million and \$3.1 million of aggregate undrawn loan commitments and standby letters of credit at September 30, 2016 and December 31, 2015, respectively, issued to borrowers whose loans were classified as nonperforming or impaired.

**Troubled Debt Restructurings (TDRs).** Included within impaired loans were \$81.2 million and \$79.2 million of nonperforming TDRs, and \$46.1 million and \$37.9 million of performing TDRs as of September 30, 2016 and December 31, 2015, respectively. All TDRs are reported as impaired loans in the calendar year of their restructuring. In subsequent years, a TDR may cease being reported as impaired if the loan was modified at a market rate and has performed according to the modified terms for at least six months. A loan that has been modified at a below market rate will return to performing status if it satisfies the six-month performance requirement; however, it will remain reported as impaired.

The following tables provide, by segment and class, the number of loans and leases modified in TDRs during the three- and nine-month periods ended September 30, 2016 and 2015, and the recorded investments and unpaid principal balances as of September 30, 2016 and 2015.

**Table 46: Modified Troubled Debt Restructurings**

(\$ In Millions)	Three Months Ended September 30, 2016			Nine Months Ended September 30, 2016		
	Number of Loans and Leases	Recorded Investment	Unpaid Principal Balance	Number of Loans and Leases	Recorded Investment	Unpaid Principal Balance
<b>Commercial</b>						
Commercial and Institutional	1	\$ 0.1	\$ 0.1	5	\$ 4.1	\$ 6.2
Commercial Real Estate	1	1.4	1.4	7	8.7	11.0
<b>Total Commercial</b>	<b>2</b>	<b>1.5</b>	<b>1.5</b>	<b>12</b>	<b>12.8</b>	<b>17.2</b>
<b>Personal</b>						
Residential Real Estate	16	6.2	6.5	60	14.8	16.1
Private Client	1	0.1	0.1	2	2.1	2.1
<b>Total Personal</b>	<b>17</b>	<b>6.3</b>	<b>6.6</b>	<b>62</b>	<b>16.9</b>	<b>18.2</b>
<b>Total Loans and Leases</b>	<b>19</b>	<b>\$ 7.8</b>	<b>\$ 8.1</b>	<b>74</b>	<b>\$ 29.7</b>	<b>\$ 35.4</b>

*Note: Period end balances reflect all paydowns and charge-offs during the period.*

(\$ In Millions)	Three Months Ended September 30, 2015			Nine Months Ended September 30, 2015		
	Number of Loans and Leases	Recorded Investment	Unpaid Principal Balance	Number of Loans and Leases	Recorded Investment	Unpaid Principal Balance
<b>Commercial</b>						
Commercial and Institutional	—	\$ —	\$ —	2	\$ 0.1	\$ 0.1
Commercial Real Estate	—	—	—	1	0.8	0.8
<b>Total Commercial</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>3</b>	<b>0.9</b>	<b>0.9</b>
<b>Personal</b>						
Residential Real Estate	26	7.6	9.4	102	23.2	29.0
Private Client	—	—	—	1	0.6	0.6
<b>Total Personal</b>	<b>26</b>	<b>7.6</b>	<b>9.4</b>	<b>103</b>	<b>23.8</b>	<b>29.6</b>
<b>Total Loans and Leases</b>	<b>26</b>	<b>\$ 7.6</b>	<b>\$ 9.4</b>	<b>106</b>	<b>\$ 24.7</b>	<b>\$ 30.5</b>

*Note: Period end balances reflect all paydowns and charge-offs during the period.*

TDR modifications involve interest rate concessions, extensions of term, deferrals of principal and other modifications. Other modifications typically reflect other nonstandard terms which Northern Trust would not offer in non-troubled situations.

During the three and nine months ended September 30, 2016, the majority of TDR modifications of loans within residential real estate were extension of term, other modifications, deferred principal, and interest rate concessions. During the three and nine months ended September 30, 2016, the majority of TDR modifications within commercial and institutional, and commercial real estate classes were extension of term, and other modifications. During the three and nine months ended September 30, 2015, the

## Notes to Consolidated Financial Statements (unaudited) (continued)

majority of TDR modifications of loans within residential real estate were interest rate concessions, extension of term, or deferred principal. The majority of TDR modifications of loans within commercial and institutional, commercial real estate, and private client classes were extension of term, deferred principal, and other modifications.

There was one residential real estate loan modified in a TDR during the twelve months ended June 30, 2016, which subsequently became nonperforming during the three and nine months ended September 30, 2016. The total recorded investment and unpaid principal balance for this loan was approximately \$0.1 million.

There were two residential real estate loans modified in TDRs during the twelve months ended June 30, 2015, which subsequently became nonperforming during the three months ended September 30, 2015. The total recorded investment and unpaid principal balance for these loans was approximately \$0.5 million.

All loans and leases modified in TDRs are evaluated for impairment. The nature and extent of impairment of TDRs, including those that have experienced a subsequent default, is considered in the determination of an appropriate level of allowance for credit losses.

Northern Trust may obtain physical possession of residential real estate collateralizing a consumer mortgage loan via foreclosure on an in-substance repossession. As of September 30, 2016, Northern Trust held foreclosed residential real estate properties with a carrying value of \$7.2 million as a result of obtaining physical possession. In addition, as of September 30, 2016, Northern Trust had consumer loans with a carrying value of \$19.5 million collateralized by residential real estate property for which formal foreclosure proceedings were in process.

**Leveraged Leases.** During the three months ended September 30, 2016, and September 30, 2015, Northern Trust determined that there was an other-than-temporary impairment of the residual value related to certain aircraft and rail car under leveraged lease agreements. During the nine months ended September 30, 2016, the impact of the impairment was \$10.2 million which was recognized as a reduction to other operating income and interest income in the consolidated statements of income. During the nine months ended September 30, 2015, the impact of the impairment was \$17.8 million, which was recognized as a reduction to interest income in the consolidated statements of income. See “Leveraged Leases” under Note 18 - Variable interest Entities for further information.

**7. Allowance for Credit Losses** — The allowance for credit losses, which represents management’s estimate of probable losses related to specific borrower relationships and inherent in the various loan and lease portfolios, undrawn commitments, and standby letters of credit, is determined by management through a disciplined credit review process. Northern Trust’s accounting policies related to the estimation of the allowance for credit losses and the charging off of loans, leases and other extensions of credit deemed uncollectible are consistent across both loan and lease segments.

As of December 31, 2015, Northern Trust changed the estimation methodology for inherent losses that have been incurred in the loan and lease portfolio. The new estimation methodology is more quantitatively focused than the previous methodology as it is based on internally developed loss data specific to the Northern Trust loan and lease portfolio. The change in methodology is accounted for as a change in estimate applicable to the current period and future periods. The new estimation methodology and the related qualitative adjustment framework segregate the loan and lease portfolio into homogeneous segments. For each segment, the probability of default and the loss given default are applied to the total exposure at default to determine a quantitative inherent allowance. The estimated allowance is reviewed by the Loan Loss Reserve Committee within a qualitative adjustment framework to determine an appropriate adjustment to the quantitative inherent allowance for each segment of the loan portfolio. In determining the appropriate adjustment, management applies judgment by assessing internal risk factors, potential limitations in the quantitative methodology and environmental factors that are not contemplated in the quantitative methodology. The Loan Loss Reserve Committee is comprised of representatives from Credit Risk Management, the reporting segments and Corporate Finance. The new methodology was used to determine the inherent allowance as of September 30, 2016.

For periods prior to the methodology change, including as of September 30, 2015, the amount of inherent allowance was based on factors that incorporated management’s evaluation of historical charge-off experience and various qualitative factors such as management’s evaluation of economic and business conditions and changes in the character and size of the loan portfolio. Factors were applied to loan and lease credit exposures aggregated by shared risk characteristics and were reviewed quarterly by the Loan Loss Reserve Committee.

Loans, leases and other extensions of credit deemed uncollectible are charged to the allowance for credit losses. Subsequent recoveries, if any, are credited to the allowance. Determinations as to whether an uncollectible loan is charged-off or a specific allowance is established are based on management’s assessment as to the level of certainty regarding the amount of loss.

## Notes to Consolidated Financial Statements (unaudited) (continued)

The following table provides information regarding changes in the total allowance for credit losses by segment during the three and nine months ended September 30, 2016 and 2015.

**Table 47: Changes in the Allowance for Credit Losses**

(In Millions)	Three Months Ended September 30,					
	2016			2015		
	Commercial	Personal	Total	Commercial	Personal	Total
Balance at Beginning of Period	\$ 112.3	\$ 114.8	\$ 227.1	\$ 152.7	\$ 121.5	\$ 274.2
Charge-Offs	(0.3)	(2.7)	(3.0)	(7.7)	(4.2)	(11.9)
Recoveries	1.0	2.8	3.8	0.5	2.0	2.5
Net (Charge-Offs) Recoveries	0.7	0.1	0.8	(7.2)	(2.2)	(9.4)
Provision for Credit Losses	4.0	(7.0)	(3.0)	(6.2)	(3.8)	(10.0)
Effect of Foreign Exchange Rates	—	—	—	(0.1)	—	(0.1)
Balance at End of Period	\$ 117.0	\$ 107.9	\$ 224.9	\$ 139.2	\$ 115.5	\$ 254.7

  

(In Millions)	Nine Months Ended September 30,					
	2016			2015		
	Commercial	Personal	Total	Commercial	Personal	Total
Balance at Beginning of Period	\$ 114.8	\$ 118.5	\$ 233.3	\$ 169.7	\$ 126.2	\$ 295.9
Charge-Offs	(4.7)	(8.5)	(13.2)	(12.9)	(12.6)	(25.5)
Recoveries	3.5	5.4	8.9	4.6	4.3	8.9
Net (Charge-Offs) Recoveries	(1.2)	(3.1)	(4.3)	(8.3)	(8.3)	(16.6)
Provision for Credit Losses	3.5	(7.5)	(4.0)	(22.1)	(2.4)	(24.5)
Effect of Foreign Exchange Rates	(0.1)	—	(0.1)	(0.1)	—	(0.1)
Balance at End of Period	\$ 117.0	\$ 107.9	\$ 224.9	\$ 139.2	\$ 115.5	\$ 254.7

The following table provides information regarding the balances of the recorded investments in loans and leases and the allowance for credit losses by segment as of September 30, 2016 and December 31, 2015.

**Table 48: Information about the Recorded Investments in Loans and Leases**

(In Millions)	September 30, 2016			December 31, 2015		
	Commercial	Personal	Total	Commercial	Personal	Total
<b>Loans and Leases</b>						
Specifically Evaluated for Impairment	\$ 75.5	\$ 97.7	\$ 173.2	\$ 56.3	\$ 101.0	\$ 157.3
Evaluated for Inherent Impairment	15,502.4	17,747.4	33,249.8	15,100.2	17,923.4	33,023.6
Total Loans and Leases	15,577.9	17,845.1	33,423.0	15,156.5	18,024.4	33,180.9
<b>Allowance for Loans and Leases</b>						
Specifically Evaluated for Impairment	8.6	0.5	9.1	3.0	0.1	3.1
Evaluated for Inherent Impairment	85.6	96.3	181.9	83.3	107.4	190.7
Allowance Assigned to Loans and Leases	94.2	96.8	191.0	86.3	107.5	193.8
<b>Allowance for Unfunded Exposures</b>						
Commitments and Standby Letters of Credit	22.8	11.1	33.9	28.5	11.0	39.5
Total Allowance for Credit Losses	\$ 117.0	\$ 107.9	\$ 224.9	\$ 114.8	\$ 118.5	\$ 233.3

**8. Pledged Assets** — Certain of Northern Trust's subsidiaries, as required or permitted by law, pledge assets to secure public and trust deposits, repurchase agreements and Federal Home Loan Bank borrowings, as well as for other purposes, including support for securities settlement, primarily related to client activities, and for potential Federal Reserve Bank discount window borrowings. As of September 30, 2016, securities and loans totaling \$39.6 billion (\$28.6 billion of government-sponsored agency and other securities, \$772.8 million of obligations of states and political subdivisions and \$10.2 billion of loans) were pledged. This compares

## Notes to Consolidated Financial Statements (unaudited) (continued)

to \$35.8 billion (\$27.1 billion of government-sponsored agency and other securities, \$117.5 million of obligations of states and political subdivisions and \$8.6 billion of loans) at December 31, 2015. Collateral required for these purposes totaled \$7.9 billion and \$8.9 billion at September 30, 2016 and December 31, 2015, respectively. Available for sale securities with a total fair value of \$1.2 billion and \$1.5 billion at September 30, 2016 and December 31, 2015 were included in the total pledged assets, which were pledged as collateral for agreements to repurchase securities sold transactions. The secured parties to these transactions have the right to repledge or sell these securities.

Northern Trust is not permitted, by contract or custom, to repledge or sell collateral from agreements to resell securities purchased transactions. The total fair value of accepted collateral was \$1.6 billion as of September 30, 2016 and \$1.5 billion as of December 31, 2015. There was no repledged or sold collateral at September 30, 2016 or December 31, 2015.

Deposits maintained to meet Federal Reserve Bank reserve requirements averaged \$2.3 billion and \$2.0 billion for the three and nine months ended September 30, 2016, and \$1.7 billion and \$1.6 billion for the three and nine months ended September 30, 2015, respectively.

**9. Goodwill and Other Intangibles** — The carrying amounts of goodwill and other intangibles assets, reflecting the effect of foreign exchange rates on non-U.S.-dollar-denominated balances, by reporting segment at September 30, 2016, and December 31, 2015, were as follows:

**Table 49: Goodwill by Reporting Segment**

<u>(In Millions)</u>	September 30, 2016	December 31, 2015
Corporate & Institutional Services	\$ 453.3	\$ 455.1
Wealth Management	71.1	71.3
Total Goodwill	<u>\$ 524.4</u>	<u>\$ 526.4</u>

The gross carrying amount and accumulated amortization of other intangible assets subject to amortization as of September 30, 2016 and December 31, 2015, were as follows:

**Table 50: Other Intangible Assets**

<u>(In Millions)</u>	September 30, 2016	December 31, 2015
Gross Carrying Amount	\$ 91.2	\$ 182.3
Less: Accumulated Amortization	45.8	135.8
Net Book Value	<u>\$ 45.4</u>	<u>\$ 46.5</u>

Other intangible assets consist primarily of the value of acquired client relationships and are included within other assets in the consolidated balance sheets. Amortization expense related to other intangible assets totaled \$2.0 million and \$6.3 million for the three and nine months ended September 30, 2016, respectively, and \$2.1 million and \$8.8 million for the three and nine months ended September 30, 2015, respectively. Amortization for the remainder of 2016 and for the years 2017, 2018, 2019, and 2020 is estimated to be \$2.6 million, \$9.0 million, \$8.3 million, \$8.2 million and \$8.2 million, respectively.

In May 2016, Northern Trust completed its acquisition of Aviate Global LLP, an institutional equity brokerage firm offering market research and execution services with offices located in the United States, Europe and the Asia-Pacific region. The purchase price, which is subject to certain performance-related adjustments over a three-year period after the acquisition date, totaled \$18.8 million inclusive of contingent consideration. Goodwill and other intangible assets associated with the acquisition totaled \$11.8 million and \$4.5 million, respectively.

**Notes to Consolidated Financial Statements (unaudited) (continued)**

**10. Reporting Segments** — The following table shows the earnings contributions of Northern Trust's reporting segments for the three- and nine- month periods ended September 30, 2016 and 2015.

**Table 51: Results of Reporting Segments**

<b>Three Months Ended September 30,</b> (\$ In Millions)	Corporate & Institutional Services		Wealth Management		Treasury and Other		Total Consolidated	
	2016	2015	2016	2015	2016	2015	2016	2015
Noninterest Income								
Trust, Investment and Other Servicing Fees	\$ 450.8	\$ 429.7	\$ 337.5	\$ 319.4	\$ —	\$ —	\$ 788.3	\$ 749.1
Foreign Exchange Trading Income	55.2	60.0	0.9	2.9	(2.5)	—	53.6	62.9
Other Noninterest Income	41.5	45.9	26.3	28.3	0.9	0.4	68.7	74.6
Net Interest Income*	138.2	108.6	164.1	142.5	7.8	23.9	310.1	275.0
Revenue*	685.7	644.2	528.8	493.1	6.2	24.3	1,220.7	1,161.6
Provision for Credit Losses	4.0	(2.8)	(7.0)	(7.2)	—	—	(3.0)	(10.0)
Noninterest Expense	487.8	464.6	318.0	316.3	37.2	31.4	843.0	812.3
Income before Income Taxes*	193.9	182.4	217.8	184.0	(31.0)	(7.1)	380.7	359.3
Provision for Income Taxes*	61.8	58.3	82.3	69.0	(21.0)	(2.6)	123.1	124.7
<b>Net Income</b>	<b>\$ 132.1</b>	<b>\$ 124.1</b>	<b>\$ 135.5</b>	<b>\$ 115.0</b>	<b>\$ (10.0)</b>	<b>\$ (4.5)</b>	<b>\$ 257.6</b>	<b>\$ 234.6</b>
Percentage of Consolidated Net Income	51%	53%	53%	49%	(4)%	(2)%	100%	100%
Average Assets	\$ 75,696.5	\$ 74,222.5	\$ 26,601.7	\$ 25,201.2	\$ 14,084.3	\$ 10,500.4	\$ 116,382.5	\$ 109,924.1

\* Non-GAAP financial measures stated on a fully taxable equivalent basis (FTE). Total consolidated includes FTE adjustments of \$7.0 million for 2016 and \$6.1 million for 2015.

<b>Nine Months Ended September 30,</b> (\$ In Millions)	Corporate & Institutional Services		Wealth Management		Treasury and Other		Total Consolidated	
	2016	2015	2016	2015	2016	2015	2016	2015
Noninterest Income								
Trust, Investment and Other Servicing Fees	\$ 1,331.1	\$ 1,269.0	\$ 982.6	\$ 964.4	\$ —	\$ —	\$ 2,313.7	\$ 2,233.4
Foreign Exchange Trading Income	169.1	199.3	7.0	10.0	2.4	—	178.5	209.3
Other Noninterest Income	113.0	131.0	79.8	83.9	124.8	107.6	317.6	322.5
Net Interest Income*	417.8	297.3	482.8	421.8	30.1	80.3	930.7	799.4
Revenue*	2,031.0	1,896.6	1,552.2	1,480.1	157.3	187.9	3,740.5	3,564.6
Provision for Credit Losses	—	(3.0)	(4.0)	(21.5)	—	—	(4.0)	(24.5)
Noninterest Expense	1,519.9	1,387.7	975.2	960.9	101.7	107.2	2,596.8	2,455.8
Income before Income Taxes*	511.1	511.9	581.0	540.7	55.6	80.7	1,147.7	1,133.3
Provision for Income Taxes*	158.0	160.9	219.1	203.2	4.6	34.7	381.7	398.8
<b>Net Income</b>	<b>\$ 353.1</b>	<b>\$ 351.0</b>	<b>\$ 361.9</b>	<b>\$ 337.5</b>	<b>\$ 51.0</b>	<b>\$ 46.0</b>	<b>\$ 766.0</b>	<b>\$ 734.5</b>
Percentage of Consolidated Net Income	46%	48%	47%	46%	7%	6%	100%	100%
Average Assets	\$ 75,589.0	\$ 73,089.3	\$ 26,525.6	\$ 24,732.4	\$ 12,795.3	11,896.6	\$ 114,909.9	\$ 109,718.3

\* Non-GAAP financial measures stated on a fully taxable equivalent basis (FTE). Total consolidated includes FTE adjustments of \$20.1 million for 2016 and \$18.7 million for 2015.

In the three- and nine-month periods ended September 30, 2015, the presentation of average assets was changed to reflect a modification to the methodology by which assets are allocated among our reporting segments. The change in presentation resulted in an increase in average assets and a reduction in net interest margin for C&IS and a reduction in average assets and an increase in net interest margin for Treasury and Other.



## Notes to Consolidated Financial Statements (unaudited) (continued)

Further discussion of reporting segment results is provided within the “Reporting Segments” section of Management’s Discussion and Analysis of Financial Condition and Results of Operations.

### 11. Stockholders’ Equity

**Preferred Stock.** The Corporation is authorized to issue 10 million shares of preferred stock without par value. The Board of Directors is authorized to fix the particular designations, preferences and relative, participating, optional and other special rights and qualifications, limitations or restrictions for each series of preferred stock issued.

On August 8, 2016, the Corporation issued and sold 500,000 depositary shares (the “Depositary Shares”), each representing a 1/100th ownership interest in a share of Series D Non-Cumulative Perpetual Preferred Stock (the “Series D Preferred Stock”). Shares of the Series D Preferred Stock have no par value and a liquidation preference of \$100,000 (equivalent to \$1,000 per depositary share). The aggregate proceeds from the public offering of the depositary shares, net of underwriting discounts, commissions and offering expenses, were \$493.5 million.

Dividends on the Series D Preferred Stock, which are not mandatory, will accrue and be payable on the liquidation preference amount, on a non-cumulative basis, at a rate per annum equal to (i) 4.60% from the original issue date of the Series D Preferred Stock to but excluding October 1, 2026; and (ii) a floating rate equal to Three-Month LIBOR plus 3.202% from and including October 1, 2026. Fixed rate dividends will be payable in arrears on the 1st day of April and October of each year, commencing on April 1, 2017, to and including October 1, 2026, and floating rate dividends will be payable in arrears on the 1st day of January, April, July and October of each year, commencing on January 1, 2027.

The Series D Preferred Stock may be redeemed at the Corporation’s option in whole, or in part, on any dividend payment date on or after October 1, 2026 at a redemption price equal to \$100,000 per share (equivalent to \$1,000 per depositary share), plus any declared and unpaid dividends, without accumulation of any undeclared dividends. The Series D Preferred Stock may be redeemed at the Corporation’s option in whole, but not in part, including prior to October 1, 2026, upon the occurrence of a regulatory capital treatment event as described in the Series D Preferred Stock Certificate of Designation.

As of September 30, 2016, the Corporation also had issued and outstanding 16 million depositary shares, each representing 1/100th ownership interest in a share of Series C Non-Cumulative Perpetual Preferred Stock (“Series C Preferred Stock”), issued in August 2014. Equity related to Series C Preferred Stock as of September 30, 2016 and December 31, 2015 totaled \$388.5 million. Series C Preferred Stock has no par value and has a liquidation preference of \$25,000 (\$25 per depositary share).

Dividends on the Series C Preferred Stock will accrue and be payable on the liquidation preference amount, on a non-cumulative basis, quarterly in arrears on the first day of January, April, July and October of each year, at a rate per annum equal to 5.85%. On July 20, 2016, the Corporation declared a cash dividend of \$365.625 per share of Series C Preferred Stock payable on October 1, 2016, to stockholders of record as of September 15, 2016.

**Common Stock.** During the three and nine months ended September 30, 2016, the Corporation repurchased 951,401 shares of common stock, including 42,012 shares withheld related to share-based compensation, at a total cost of \$64.9 million (\$68.26 average price per share) and 5,231,246 shares of common stock, including 429,855 shares withheld related to share-based compensation, at a total cost of \$346.1 million (\$66.15 average price per share), respectively. The Corporation’s current common stock repurchase authorization was approved by the Board of Directors in April 2015, pursuant to which the Corporation may repurchase up to 15 million shares. The stock repurchase authorization remaining as of September 30, 2016 was 4,472,756 shares. The repurchase authorization approved by the Board of Directors has no expiration date.

Under the Corporation’s 2016 Capital Plan, which was reviewed without objection by the Federal Reserve, the Corporation may repurchase up to \$210.1 million of common stock after September 30, 2016 through June 2017.

**Notes to Consolidated Financial Statements (unaudited) (continued)**

**12. Accumulated Other Comprehensive Income (Loss)** — The following tables summarize the components of accumulated other comprehensive income (loss) (AOCI) at September 30, 2016 and 2015, and changes during the three- and nine- month periods then ended.

**Table 52: Summary of Changes in Accumulated Other Comprehensive Income (Loss)**

<u>(In Millions)</u>	<u>Balance at September 30, 2016</u>	<u>Net Change</u>	<u>Balance at December 31, 2015</u>
Net Unrealized Gains (Losses) on Securities Available for Sale	\$ 63.3	\$ 94.3	\$ (31.0)
Net Unrealized Gains (Losses) on Cash Flow Hedges	3.6	6.6	(3.0)
Net Foreign Currency Adjustments	(16.9)	0.7	(17.6)
Net Pension and Other Postretirement Benefit Adjustments	(309.7)	11.4	(321.1)
Total	<u>\$ (259.7)</u>	<u>\$ 113.0</u>	<u>\$ (372.7)</u>

  

<u>(In Millions)</u>	<u>Balance at September 30, 2015</u>	<u>Net Change</u>	<u>Balance at December 31, 2014</u>
Net Unrealized Gains (Losses) on Securities Available for Sale	\$ 52.3	\$ 24.7	\$ 27.6
Net Unrealized Gains (Losses) on Cash Flow Hedges	0.6	5.3	(4.7)
Net Foreign Currency Adjustments	(4.1)	(2.4)	(1.7)
Net Pension and Other Postretirement Benefit Adjustments	(322.5)	18.4	(340.9)
Total	<u>\$ (273.7)</u>	<u>\$ 46.0</u>	<u>\$ (319.7)</u>

Notes to Consolidated Financial Statements (unaudited) (continued)

Table 53: Details of Changes in Accumulated Other Comprehensive Income (Loss)

(In Millions)	Three Months Ended September 30,					
	2016			2015		
	Before Tax	Tax Effect	After Tax	Before Tax	Tax Effect	After Tax
<b>Unrealized Gains (Losses) on Securities Available for Sale</b>						
Noncredit-Related Unrealized Losses on Securities OTTI	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Other Unrealized Gains (Losses) on Securities Available for Sale	(22.3)	8.4	(13.9)	(11.0)	4.0	(7.0)
Reclassification Adjustment for (Gains) Losses Included in Net Income	(0.2)	0.2	—	—	—	—
<b>Net Change</b>	<b>(22.5)</b>	<b>8.6</b>	<b>(13.9)</b>	<b>(11.0)</b>	<b>4.0</b>	<b>(7.0)</b>
<b>Unrealized Gains (Losses) on Cash Flow Hedges</b>						
Unrealized Gains (Losses) on Cash Flow Hedges	(6.3)	3.5	(2.8)	6.4	(3.3)	3.1
Reclassification Adjustment for (Gains) Losses Included in Net Income	4.6	(1.7)	2.9	0.1	—	0.1
<b>Net Change</b>	<b>(1.7)</b>	<b>1.8</b>	<b>0.1</b>	<b>6.5</b>	<b>(3.3)</b>	<b>3.2</b>
<b>Foreign Currency Adjustments</b>						
Foreign Currency Translation Adjustments	(11.7)	(0.9)	(12.6)	(32.6)	—	(32.6)
Long-Term Intra-Entity Foreign Currency Transaction Gains (Losses)	0.8	(0.3)	0.5	(0.3)	0.1	(0.2)
Net Investment Hedge Gains (Losses)	4.1	(1.5)	2.6	49.1	(18.6)	30.5
Reclassification Adjustment for (Gains) Losses Included in Net Income	—	—	—	—	—	—
<b>Net Change</b>	<b>(6.8)</b>	<b>(2.7)</b>	<b>(9.5)</b>	<b>16.2</b>	<b>(18.5)</b>	<b>(2.3)</b>
<b>Pension and Other Postretirement Benefit Adjustments</b>						
Net Actuarial Gain (Loss)	—	—	—	—	—	—
Reclassification Adjustment for (Gains) Losses Included in Net Income	6.3	(3.0)	3.3	9.6	(3.5)	6.1
<b>Net Change</b>	<b>\$ 6.3</b>	<b>\$ (3.0)</b>	<b>\$ 3.3</b>	<b>\$ 9.6</b>	<b>\$ (3.5)</b>	<b>\$ 6.1</b>

Notes to Consolidated Financial Statements (unaudited) (continued)

Nine Months Ended September 30,

(In Millions)	2016			2015		
	Before Tax	Tax Effect	After Tax	Before Tax	Tax Effect	After Tax
<b>Unrealized Gains (Losses) on Securities Available for Sale</b>						
Noncredit-Related Unrealized Losses on Securities OTTI	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Other Unrealized Gains (Losses) on Securities Available for Sale	152.1	(57.6)	94.6	39.4	(14.9)	24.5
Reclassification Adjustment for (Gains) Losses Included in Net Income	(0.5)	0.2	(0.3)	0.3	(0.1)	0.2
<b>Net Change</b>	<b>151.6</b>	<b>(57.4)</b>	<b>94.3</b>	<b>39.7</b>	<b>(15.0)</b>	<b>24.7</b>
<b>Unrealized Gains (Losses) on Cash Flow Hedges</b>						
Unrealized Gains (Losses) on Cash Flow Hedges	3.7	(0.3)	3.4	6.5	(2.7)	3.8
Reclassification Adjustment for (Gains) Losses Included in Net Income	5.2	(2.0)	3.2	2.4	(0.9)	1.5
<b>Net Change</b>	<b>8.9</b>	<b>(2.3)</b>	<b>6.6</b>	<b>8.9</b>	<b>(3.6)</b>	<b>5.3</b>
<b>Foreign Currency Adjustments</b>						
Foreign Currency Translation Adjustments	(52.7)	(2.3)	(55.0)	(69.7)	14.6	(55.1)
Long-Term Intra-Entity Foreign Currency Transaction Gains (Losses)	2.0	(0.8)	1.2	0.2	(0.1)	0.1
Net Investment Hedge Gains (Losses)	87.6	(33.1)	54.5	84.6	(32.0)	52.6
Reclassification Adjustment for (Gains) Losses Included in Net Income	—	—	—	—	—	—
<b>Net Change</b>	<b>36.9</b>	<b>(36.2)</b>	<b>0.7</b>	<b>15.1</b>	<b>(17.5)</b>	<b>(2.4)</b>
<b>Pension and Other Postretirement Benefit Adjustments</b>						
Net Actuarial Gain (Loss)	—	—	—	—	—	—
Reclassification Adjustment for (Gains) Losses Included in Net Income	19.1	(7.7)	11.4	28.8	(10.4)	18.4
<b>Net Change</b>	<b>\$ 19.1</b>	<b>\$ (7.7)</b>	<b>\$ 11.4</b>	<b>\$ 28.8</b>	<b>\$ (10.4)</b>	<b>\$ 18.4</b>

The following table provides the location and before-tax amounts of reclassifications out of AOCI during the three and nine months ended September 30, 2016.

**Table 54: Reclassification Adjustment out of Accumulated Other Comprehensive Income (Loss)**

(In Millions)	Location of Reclassification Adjustments Recognized in Income	Amount of Reclassification Adjustments Recognized in Income	
		Three Months Ended September 30, 2016	Nine Months Ended September 30, 2016
<b>Securities Available for Sale</b>			
Realized (Gains) Losses on Securities Available for Sale	Investment Security Gains (Losses), net	\$ (0.2)	\$ (0.5)
<b>Realized Losses on Cash Flow Hedges</b>			
Foreign Exchange Contracts	Other Operating Income/Expense	4.6	5.2
<b>Pension and Other Postretirement Benefit Adjustments</b>			
Amortization of Net Actuarial Loss	Employee Benefits	6.4	19.3
Amortization of Prior Service Cost	Employee Benefits	(0.1)	(0.2)
Gross Reclassification Adjustment		\$ 6.3	\$ 19.1

**Notes to Consolidated Financial Statements (unaudited) (continued)**

**13. Net Income Per Common Share Computations** — The computations of net income per common share are presented in the following table.

**Table 55: Net Income per Common Share**

(\$ In Millions Except Per Common Share Information)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
<b>Basic Net Income Per Common Share</b>				
Average Number of Common Shares Outstanding	<b>226,540,086</b>	232,231,720	<b>227,561,218</b>	232,916,425
Net Income	\$ <b>257.6</b>	\$ 234.6	\$ <b>766.0</b>	\$ 734.5
Less: Dividends on Preferred Stock	<b>5.9</b>	5.8	<b>17.6</b>	17.5
Net Income Applicable to Common Stock	<b>251.7</b>	228.8	<b>748.4</b>	717.0
Less: Earnings Allocated to Participating Securities	<b>4.8</b>	3.8	<b>13.7</b>	11.6
Earnings Allocated to Common Shares Outstanding	<b>246.9</b>	225.0	<b>734.7</b>	705.4
Basic Net Income Per Common Share	\$ <b>1.09</b>	\$ 0.97	\$ <b>3.23</b>	\$ 3.03
<b>Diluted Net Income Per Common Share</b>				
Average Number of Common Shares Outstanding	<b>226,540,086</b>	232,231,720	<b>227,561,218</b>	232,916,425
Plus: Dilutive Effect of Share-based Compensation	<b>1,515,109</b>	1,931,470	<b>1,479,400</b>	1,974,357
Average Common and Potential Common Shares	<b>228,055,195</b>	234,163,190	<b>229,040,618</b>	234,890,782
Earnings Allocated to Common and Potential Common Shares	\$ <b>247.0</b>	\$ 225.0	\$ <b>734.8</b>	\$ 705.4
Diluted Net Income Per Common Share	<b>1.08</b>	0.96	<b>3.21</b>	3.00

*Note: Common stock equivalents of 334,184 and 1,480,118 for the three and nine months ended September 30, 2016, respectively, were not included in the computation of diluted net income per common share because their inclusion would have been antidilutive. For the three months ended September 30, 2015, there were no common stock equivalents excluded in the computation of diluted net income per common share. Common stock equivalents of 496,104 for the nine months September 30, 2015, were not included in the computation of diluted net income per common share because their inclusion would have been antidilutive.*

**Notes to Consolidated Financial Statements (unaudited) (continued)**

**14. Net Interest Income** — The components of net interest income were as follows:

**Table 56: Net Interest Income**

(In Millions)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Interest Income				
Loans and Leases	\$ 202.1	\$ 186.7	\$ 604.3	\$ 541.6
Securities — Taxable	103.3	81.5	303.4	235.2
— Non-Taxable	2.2	1.1	5.0	3.7
Interest-Bearing Due from and Deposits with Banks <sup>(1)</sup>	15.4	22.1	49.4	64.9
Federal Reserve and Other Central Bank Deposits	26.2	14.3	83.8	47.9
Total Interest Income	<u>349.2</u>	<u>305.7</u>	<u>1,045.9</u>	<u>893.3</u>
Interest Expense				
Deposits	20.0	17.9	63.4	53.0
Federal Funds Purchased	0.4	0.1	1.0	0.4
Securities Sold Under Agreements to Repurchase	0.5	—	1.5	0.2
Other Borrowings	5.7	1.0	12.4	3.3
Senior Notes	11.8	11.7	35.2	35.2
Long-Term Debt	6.8	5.5	19.3	18.8
Floating Rate Capital Debt	0.9	0.6	2.5	1.7
Total Interest Expense	<u>46.1</u>	<u>36.8</u>	<u>135.3</u>	<u>112.6</u>
Net Interest Income	<u>\$ 303.1</u>	<u>\$ 268.9</u>	<u>\$ 910.6</u>	<u>\$ 780.7</u>

<sup>(1)</sup> *Interest-Bearing Due from and Deposits with Banks includes the interest-bearing component of Cash and Due from Banks and Interest-Bearing Deposits with Banks as presented on the consolidated balance sheets.*

**15. Income Taxes** — Income tax expense for the three and nine months ended September 30, 2016, of \$116.1 million and \$361.6 million was recorded, representing an effective tax rate of 31.1% and 32.1%, respectively. The prior-year three- and nine- month provisions for income taxes was \$118.6 million and \$380.1 million, representing an effective tax rate of 33.6% and 34.1%, respectively.

**Notes to Consolidated Financial Statements (unaudited) (continued)**

**16. Pension and Postretirement Health Care**— The following tables set forth the net periodic pension and postretirement benefit expense for Northern Trust’s U.S. and non-U.S. pension plans, supplemental pension plan, and postretirement health care plan for the three and nine months ended September 30, 2016 and 2015.

**Table 57: Net Periodic Pension Expense (Benefit)**

Net Periodic Pension Expense <u><b>U.S. Plan</b></u>	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
(In Millions)				
Service Cost	\$ 9.3	\$ 9.5	\$ 28.0	\$ 28.4
Interest Cost	11.5	11.1	34.4	33.5
Expected Return on Plan Assets	(23.6)	(24.1)	(70.8)	(72.3)
Amortization				
Net Actuarial Loss	4.7	7.5	14.1	22.3
Prior Service Cost	(0.1)	(0.1)	(0.3)	(0.3)
Net Periodic Pension Expense	\$ 1.8	\$ 3.9	\$ 5.4	\$ 11.6
Net Periodic Pension Expense <u><b>Non-U.S. Plans</b></u>	Three Months Ended September 30,		Nine Months Ended September 30,	
(In Millions)	2016	2015	2016	2015
Interest Cost	\$ 1.2	\$ 1.4	\$ 3.7	\$ 4.2
Expected Return on Plan Assets	(1.2)	(1.5)	(3.7)	(4.4)
Net Actuarial Loss Amortization	0.3	0.4	0.8	1.2
Net Periodic Pension Expense	\$ 0.3	\$ 0.3	\$ 0.8	\$ 1.0
Net Periodic Pension Expense <u><b>Supplemental Plan</b></u>	Three Months Ended September 30,		Nine Months Ended September 30,	
(In Millions)	2016	2015	2016	2015
Service Cost	\$ 0.9	\$ 0.9	\$ 2.6	\$ 2.7
Interest Cost	1.3	1.3	3.9	3.8
Amortization				
Net Actuarial Loss	1.5	1.8	4.4	5.5
Prior Service Cost	—	—	0.1	0.1
Net Periodic Pension Expense	\$ 3.7	\$ 4.0	\$ 11.0	\$ 12.1
Net Periodic Postretirement Expense <u><b>Postretirement Health Care Plan</b></u>	Three Months Ended September 30,		Nine Months Ended September 30,	
(In Millions)	2016	2015	2016	2015
Service Cost	\$ —	\$ —	\$ 0.1	\$ 0.1
Interest Cost	0.4	0.3	1.1	1.0
Amortization				
Net Actuarial (Gain)	—	—	—	—
Net Periodic Postretirement Expense	\$ 0.4	\$ 0.3	\$ 1.2	\$ 1.1

## Notes to Consolidated Financial Statements (unaudited) (continued)

**17. Share-Based Compensation Plans** — The Northern Trust Corporation 2012 Stock Plan provides for the grant of nonqualified stock options, incentive stock options, stock appreciation rights, stock awards, restricted stock units and performance stock units.

Total compensation expense for share-based payment arrangements and the associated tax impacts were as follows for the three and nine months ended September 30, 2016 and 2015.

**Table 58: Total Compensation Expense for Share-Based Payment Arrangements**

(In Millions)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Restricted Stock Unit Awards	\$ 15.0	\$ 11.8	\$ 45.0	\$ 38.7
Stock Options	0.9	1.3	8.1	9.0
Performance Stock Units	4.5	3.7	13.1	11.2
Total Share-Based Compensation Expense	20.4	16.8	66.2	58.9
Tax Benefits Recognized	\$ 7.7	\$ 6.4	\$ 25.0	\$ 22.2

**18. Variable Interest Entities** — Variable Interest Entities (VIEs) are defined within GAAP as entities that either have a total equity investment that is insufficient to permit the entity to finance its activities without additional subordinated financial support or whose equity investors lack the characteristics of a controlling financial interest. Investors that finance a VIE through debt or equity interests, or other counterparties that provide other forms of support, such as guarantees, subordinated fee arrangements, or certain types of derivative contracts, are variable interest holders in the entity. The variable interest holder, if any, that has both the power to direct the activities that most significantly impact the entity and a variable interest that could potentially be significant to the entity is deemed to be the VIE's primary beneficiary and is required to consolidate the VIE.

On January 1, 2016, Northern Trust adopted ASU 2015-02, "Consolidation (Topic 810): Amendments to the Consolidation Analysis" (ASU 2015-02), which modified the Corporation's evaluation of whether certain legal entities are VIEs, and if Northern Trust would be deemed to be the primary beneficiary of the VIEs. Upon adoption, Northern Trust was not deemed to be the primary beneficiary of the VIEs, and therefore there was no impact to its consolidated financial position or statement of operations.

**Leveraged Leases.** In leveraged leasing transactions, Northern Trust acts as lessor of the underlying asset subject to the lease and typically funds 20 - 30% of the asset's cost via an equity ownership in a trust with the remaining 70 - 80% provided by third-party non-recourse debt holders. In such transactions, the trusts, which are VIEs, are created to provide the lessee use of the property with substantially all of the rights and obligations of ownership. The lessee's maintenance and operation of the leased property has a direct effect on the fair value of the underlying property, and the lessee also has the ability to increase the benefits it can receive and limit the losses it can suffer by the manner in which it uses the property. As a result, Northern Trust has determined that it is not the primary beneficiary of these VIEs given it lacks the power to direct the activities that most significantly impact the economic performance of the VIEs.

Northern Trust's maximum exposure to loss as a result of its involvement with the leveraged lease trust VIEs is limited to the carrying amounts of its leveraged lease investments. As of September 30, 2016 and December 31, 2015, the carrying amounts of these investments, which are included in loans and leases in the consolidated balance sheets, were \$193.5 million and \$389.4 million, respectively. Northern Trust's funding requirements relative to the VIEs are limited to its invested capital. Northern Trust has no other liquidity arrangements or obligations to purchase assets of the VIEs that would expose Northern Trust to a loss.

**Tax Credit Structures.** Northern Trust invests in qualified affordable housing projects and community development entities (collectively, community development projects) that are designed to generate a return primarily through the realization of tax credits. The community development projects are formed as limited partnerships and LLCs in which Northern Trust invests as a limited partner/investor member through equity contributions. The economic performance of the community development projects, which are VIEs, is subject to the performance of their underlying investment and their ability to operate in compliance with the rules and regulations necessary for the qualification of tax credits generated by equity investments. Northern Trust has determined that it is not the primary beneficiary of any community development projects as it lacks the power to direct the activities that most significantly impact the economic performance of the underlying investments or to affect their ability to operate in compliance with the rules and regulations necessary for the qualification of tax credits generated by equity investments. This power is held by the general partners and managing members who exercise full and exclusive control of the operations of the VIEs.



## Notes to Consolidated Financial Statements (unaudited) (continued)

Northern Trust's maximum exposure to loss as a result of its involvement with community development projects is limited to the carrying amount of its investments, including any undrawn commitments. As of September 30, 2016 and December 31, 2015, the carrying amount of investments in community development projects that generate tax credits, included in other assets in the consolidated balance sheets, totaled \$165.1 million and \$173.5 million, respectively. As of September 30, 2016 and December 31, 2015, liabilities related to undrawn commitments on investments in tax credit community development projects, included in other liabilities in the consolidated balance sheets, totaled \$32.2 million and \$10.5 million, respectively. Northern Trust's funding requirements are limited to its invested capital and undrawn commitments for future equity contributions. Northern Trust has no exposure to loss from liquidity arrangements and no obligation to purchase assets of the community development projects.

Affordable housing tax credits and other tax benefits attributable to community development projects totaled \$12.5 million and \$13.1 million, respectively, for the three months ended September 30, 2016 and 2015, and \$36.5 million and \$39.6 million, respectively, for the nine months ended September 30, 2016 and 2015.

**Investment Funds.** Northern Trust acts as asset manager for various funds in which clients of Northern Trust are investors. As an asset manager of funds, Northern Trust earns a competitively priced fee that is based on assets managed and varies with each fund's investment objective. Based on its analysis, Northern Trust has determined that it is not the primary beneficiary of these VIEs under GAAP.

Some of the funds (Funds) for which Northern Trust acts as asset manager comply or operate in accordance with requirements that are similar to those in Rule 2a-7 of the Investment Company Act of 1940 for registered money market funds and therefore the Funds are exempt from the consolidation requirements in ASU 2015-02. Northern Trust voluntarily waived \$0.2 million and \$8.1 million of money market mutual fund fees for the three months and nine months ended September 30, 2016, respectively. Northern Trust does not have any explicit arrangements to provide financial support to the Funds. Any potential future support of the Funds will be at the discretion of Northern Trust after an evaluation of the specific facts and circumstances.

Periodically, Northern Trust makes seed capital investments to certain funds. As of September 30, 2016 Northern Trust had no seed capital investments and no unfunded commitments related to seed capital investments. As of December 31, 2015, Northern Trust had a \$25.3 million investment, valued using net asset value per share and included in other assets, and a \$25.0 million unfunded commitment related to seed capital investments.

### 19. Contingent Liabilities

**Commitments, Letters of Credit and Indemnifications.** Northern Trust, in the normal course of business, enters into various types of commitments and issues letters of credit to meet the liquidity and credit enhancement needs of its clients.

Legally binding commitments to extend credit generally have fixed expiration dates or other termination clauses. Since a significant portion of the commitments are expected to expire without being drawn upon, the total commitment amount does not necessarily represent future loans or liquidity requirements. Legally binding commitments to extend credit totaled \$34.7 billion and \$37.2 billion as of September 30, 2016 and December 31, 2015, respectively.

Standby letters of credit obligate Northern Trust to meet certain financial obligations of its clients, if, under the contractual terms of the agreement, the clients are unable to do so. These instruments are primarily issued to support public and private financial commitments, including commercial paper, bond financing, initial margin requirements on futures exchanges and similar transactions. Northern Trust is obligated to meet the entire financial obligation of these agreements and in certain cases is able to recover the amounts paid through recourse against collateral received or other participants. Standby letters of credit outstanding were \$4.0 billion as of September 30, 2016 and December 31, 2015.

As part of its securities custody activities and at the direction of its clients, Northern Trust lends securities owned by clients to borrowers who are reviewed and approved by the Northern Trust Counterparty Risk Management Committee. In connection with these activities, Northern Trust has issued indemnifications to certain clients against certain losses that are a direct result of a borrower's failure to return securities when due, should the value of such securities exceed the value of the collateral required to be posted. Borrowers are required to collateralize fully securities received with cash or marketable securities. As securities are loaned, collateral is maintained at a minimum of 100% of the fair value of the securities plus accrued interest. The collateral is revalued on a daily basis. The amount of securities loaned as of September 30, 2016 and December 31, 2015 subject to indemnification was \$103.6 billion and \$94.5 billion, respectively. Because of the credit quality of the borrowers and the requirement to collateralize fully securities borrowed, management believes that the exposure to credit loss from this activity is not significant and no liability was recorded as of September 30, 2016 or December 31, 2015, related to these indemnifications.

## Notes to Consolidated Financial Statements (unaudited) (continued)

**Legal Proceedings.** In the normal course of business, the Corporation and its subsidiaries are routinely defendants in or parties to a number of pending and threatened legal actions, including, but not limited to, actions brought on behalf of various claimants or classes of claimants, regulatory matters, employment matters and challenges from tax authorities regarding the amount of taxes due. In certain of these actions and proceedings, claims for substantial monetary damages or adjustments to recorded tax liabilities are asserted.

Based on current knowledge, after consultation with legal counsel and after taking into account current accruals, management does not believe that losses, if any, arising from pending litigation or threatened legal actions or regulatory matters will have a material adverse effect on the consolidated financial position or liquidity of the Corporation, although such matters could have a material adverse effect on the Corporation's operating results for a particular period.

Under GAAP, (i) an event is "probable" if the "future event or events are likely to occur"; (ii) an event is "reasonably possible" if "the chance of the future event or events occurring is more than remote but less than likely"; and (iii) an event is "remote" if "the chance of the future event or events occurring is slight."

For the reasons set out in this paragraph, the outcome of some matters is inherently difficult to predict and/or the range of loss cannot be reasonably estimated. This may be the case in matters that (i) will be decided by a jury, (ii) are in early stages, (iii) involve uncertainty as to the likelihood of a class being certified or the ultimate size of the class, (iv) are subject to appeals or motions, (v) involve significant factual issues to be resolved, including with respect to the amount of damages, (vi) do not specify the amount of damages sought or (vii) seek very large damages based on novel and complex damage and liability legal theories. Accordingly, the Corporation cannot reasonably estimate the eventual outcome of these pending matters, the timing of their ultimate resolution or what the eventual loss, fines or penalties, if any, related to each pending matter will be.

In accordance with applicable accounting guidance, the Corporation records accruals for litigation and regulatory matters when those matters present loss contingencies that are both probable and reasonably estimable. When loss contingencies are not both probable and reasonably estimable, the Corporation does not record accruals. No material accruals have been recorded for pending litigation or threatened legal actions or regulatory matters.

For a limited number of the matters for which a loss is reasonably possible in future periods, whether in excess of an accrued liability or where there is no accrued liability, the Corporation is able to estimate a range of possible loss. As of September 30, 2016, the Corporation has estimated the upper end of the range of reasonably possible losses for these matters to be approximately \$35 million in the aggregate. This aggregate amount of reasonably possible loss is based upon currently available information and is subject to significant judgment and a variety of assumptions and known and unknown uncertainties. The matters underlying the estimated range will change from time to time, and actual results will vary significantly from the current estimate.

In certain other pending matters, there may be a range of reasonably possible losses (including reasonably possible losses in excess of amounts accrued) that cannot be reasonably estimated for the reasons described above. Such matters are not included in the estimate of reasonably possible losses identified above.

A number of participants in Northern Trust's securities lending program, which is associated with its asset servicing business, commenced either individual lawsuits or purported class actions in which they claimed, among other things, that Northern Trust failed to exercise prudence in the investment management of the collateral received from the borrowers of the securities, resulting in losses associated with the 2008 financial crisis that they sought to recover. The cases asserted various contractual, statutory and common law claims, including claims for breach of fiduciary duty under common law and under the Employee Retirement Income Security Act (ERISA). In 2013, Northern Trust recorded a \$19.2 million charge in connection with a settlement to resolve certain claims related to two of these lawsuits. In the three months ended June 30, 2016, Northern Trust recorded a \$46.5 million charge in connection with a settlement to resolve all but one of the remaining claims. All but \$4.3 million of this settlement became final in the three months ended September 30, 2016. The remaining \$4.3 million has received preliminary court approval, with a final approval hearing scheduled for January 2017. In the three months ended September 30, 2016, Northern Trust recorded a \$3.5 million charge in connection with the settlement of the one claim that had not been part of the previous settlement.

As previously disclosed in April 2014, Northern Trust remains subject to an investigation by the U.S. Securities and Exchange Commission (SEC) related to Northern Trust's securities lending activities. Northern Trust continues to cooperate with the SEC in this investigation.

In January 2015, the Public Prosecutor's Office of France recommended that certain charges be brought against Northern Trust Fiduciary Services (Guernsey) Limited (NTFS), an indirect subsidiary of the Corporation, relating to the administration of two trusts for which NTFS serves as trustee. In April 2015, a French investigating magistrate judge charged NTFS with complicity in

## Notes to Consolidated Financial Statements (unaudited) (continued)

estate tax fraud. Charges also were brought against a number of other persons and entities related to this matter. As trustee, NTFS provided no tax advice and had no involvement in the preparation or filing of the challenged estate tax filings. NTFS has contested the criminal charge in the French court. The trial related to this matter concluded in October 2016, with the court's decision expected in January 2017.

**Visa Class B Common Shares.** Northern Trust, as a member of Visa U.S.A. Inc. (Visa U.S.A.) and in connection with the 2007 restructuring of Visa U.S.A. and its affiliates and the 2008 initial public offering of Visa Inc. (Visa), received certain Visa Class B common shares. The Visa Class B common shares are subject to certain selling restrictions until the final resolution of the covered litigation noted below, at which time the shares are convertible into Visa Class A common shares based on a conversion rate dependent upon the ultimate cost of resolving the covered litigation.

Certain members of Visa U.S.A. are obligated to indemnify Visa for losses resulting from certain litigation relating to interchange fees (the covered litigation). On October 19, 2012, Visa signed a settlement agreement with plaintiff representatives for binding settlement of the covered litigation. On January 14, 2014, the United States District Court for the Eastern District of New York entered a final judgment order approving the settlement with the class plaintiffs. A number of objectors appealed from that order and more than 30 opt-out cases have been filed by merchants in various federal district courts. On June 30, 2016, the United States Court of Appeals for the Second Circuit reversed the District Court's approval of the settlement and remanded the case to the District Court for further proceedings. The ultimate resolution of the covered litigation and the timing for removal of the selling restrictions on the Visa Class B common shares are uncertain.

In June 2016 and 2015, Northern Trust recorded a \$123.1 million and \$99.9 million net gain on the sale of 1.1 million and 1.0 million of its Visa Class B common shares, respectively. Northern Trust continued to hold approximately 4.1 million and 5.2 million Visa Class B common shares, which are recorded at their original cost basis of zero as of September 30, 2016 and 2015, respectively.

**20. Derivative Financial Instruments** — Northern Trust is a party to various derivative financial instruments that are used in the normal course of business to meet the needs of its clients, as part of its trading activity for its own account and as part of its risk management activities. These instruments include foreign exchange contracts, interest rate contracts, total return swap contracts, and credit default swap contracts.

Northern Trust's primary risks associated with these instruments are the possibility that interest rates, foreign exchange rates, equity prices, or credit spreads could change in an unanticipated manner, resulting in higher costs or a loss in the underlying value of the instrument. These risks are mitigated by establishing limits, monitoring the level of actual positions taken against such established limits and monitoring the level of any interest rate sensitivity gaps created by such positions. When establishing position limits, market liquidity and volatility, as well as experience in each market, are taken into account.

Credit risk associated with derivative instruments relates to the failure of the counterparty and the failure of Northern Trust to pay based on the contractual terms of the agreement, and is generally limited to the unrealized fair value gains and losses, respectively, on these instruments, net of any cash collateral received or deposited. The amount of credit risk will increase or decrease during the lives of the instruments as interest rates, foreign exchange rates or other underlying exposures fluctuate. Northern Trust's risk is controlled by limiting such activity to an approved list of counterparties and by subjecting such activity to the same credit and quality controls as are followed in lending and investment activities. Credit Support Annexes and other similar agreements are currently in place with a number of Northern Trust's counterparties which mitigate the aforementioned credit risk associated with derivative activity conducted with those counterparties by requiring that significant net unrealized fair value gains be supported by collateral placed with Northern Trust.

All derivative financial instruments, whether designated as hedges or not, are recorded in the consolidated balance sheets at fair value within other assets or other liabilities. As noted in the discussions below, the manner in which changes in the fair value of a derivative is accounted for in the consolidated statements of income depends on whether the contract has been designated as a hedge and qualifies for hedge accounting under GAAP. Northern Trust has elected to net derivative assets and liabilities when legally enforceable master netting arrangements or similar agreements exist between Northern Trust and the counterparty. Derivative assets and liabilities recorded in the consolidated balance sheets were each reduced by \$1.3 billion as of September 30, 2016 and December 31, 2015, respectively, as a result of master netting arrangements and similar agreements in place. Derivative assets and liabilities recorded at September 30, 2016, also reflect reductions of \$339.0 million and \$768.5 million, respectively, as a result of cash collateral received from and deposited with derivative counterparties, respectively. This compares with reductions of derivative assets and liabilities of \$322.8 million and \$440.2 million, respectively, at December 31, 2015. Additional cash collateral received from and deposited with derivative counterparties totaling \$34.0 million and \$98.4 million, respectively, as of September 30, 2016, and \$31.1 million and \$27.3 million, respectively, as of December 31, 2015, were not offset against derivative

## Notes to Consolidated Financial Statements (unaudited) (continued)

assets and liabilities in the consolidated balance sheets as the amounts exceeded the net derivative positions with those counterparties. Northern Trust centrally clears eligible interest rate derivative instruments as required under Title VII of the Dodd-Frank Wall Street Reform and Consumer Protection Act. Securities posted as collateral for these transactions totaled \$51.1 million and \$15.4 million at September 30, 2016 and December 31, 2015, respectively, are not offset against derivative assets and liabilities in the consolidated balance sheets, and the counterparty receiving the securities as collateral does not have the right to repledge or sell the securities.

Certain master netting arrangements Northern Trust enters into with derivative counterparties contain credit-risk-related contingent features in which the counterparty has the option to declare Northern Trust in default and accelerate cash settlement of net derivative liabilities with the counterparty in the event Northern Trust's credit rating falls below specified levels. The aggregate fair value of all derivative instruments with credit-risk-related contingent features that were in a liability position was \$688.1 million and \$553.2 million at September 30, 2016 and December 31, 2015, respectively. Cash collateral amounts deposited with derivative counterparties on those dates included \$665.0 million and \$163.0 million, respectively, posted against these liabilities, resulting in a net maximum amount of termination payments that could have been required at September 30, 2016 and December 31, 2015, of \$23.1 million and \$390.2 million, respectively. Accelerated settlement of these liabilities would not have a material effect on the consolidated financial position or liquidity of Northern Trust.

**Foreign exchange contracts** are agreements to exchange specific amounts of currencies at a future date, at a specified rate of exchange. Foreign exchange contracts are entered into primarily to meet the foreign exchange needs of clients. Foreign exchange contracts are also used for trading purposes and risk management. For risk management purposes, Northern Trust uses foreign exchange contracts to reduce its exposure to changes in foreign exchange rates relating to certain forecasted non-functional-currency-denominated revenue and expenditure transactions, foreign-currency-denominated assets and liabilities, including investment securities and net investments in non-U.S. affiliates.

**Interest rate contracts** include swap and option contracts. Interest rate swap contracts involve the exchange of fixed and floating rate interest payment obligations without the exchange of the underlying principal amounts. Northern Trust enters into interest rate swap contracts with its clients and also may utilize such contracts to reduce or eliminate the exposure to changes in the cash flows or fair value of hedged assets or liabilities due to changes in interest rates. Interest rate option contracts may include caps, floors, collars and swaptions, and provide for the transfer or reduction of interest rate risk, typically in exchange for a fee. Northern Trust enters into option contracts primarily as a seller of interest rate protection to clients. Northern Trust receives a fee at the outset of the agreement for the assumption of the risk of an unfavorable change in interest rates. This assumed interest rate risk is then mitigated by entering into an offsetting position with an outside counterparty. Northern Trust may also purchase or enter into option contracts for risk management purposes including to reduce the exposure to changes in the cash flows of hedged assets due to changes in interest rates.

**Client-Related and Trading Derivative Instruments.** Approximately 96% of Northern Trust's derivatives outstanding at September 30, 2016 and December 31, 2015, measured on a notional value basis, relate to client-related and trading activities. These activities consist principally of providing foreign exchange services to clients in connection with Northern Trust's global custody business. However, in the normal course of business, Northern Trust also engages in trading of currencies for its own account.

The following table shows the notional and fair values of client-related and trading derivative financial instruments. Notional amounts of derivative financial instruments do not represent credit risk, and are not recorded in the consolidated balance sheets. They are used merely to express the volume of this activity. Northern Trust's credit-related risk of loss is limited to the positive fair value of the derivative instrument, which is significantly less than the notional amount.

**Table 59: Notional and Fair Values of Client-Related and Trading Derivative Financial Instruments**

(In Millions)	September 30, 2016			December 31, 2015		
	Notional Value	Fair Value		Notional Value	Fair Value	
		Asset	Liability		Asset	Liability
Foreign Exchange Contracts	\$ 264,951.8	\$ 2,231.2	\$ 2,191.5	\$ 246,628.5	\$ 2,541.8	\$ 2,500.4
Interest Rate Contracts	7,005.1	183.8	181.8	6,209.5	111.1	108.5
<b>Total</b>	<b>\$ 271,956.9</b>	<b>\$ 2,415.0</b>	<b>\$ 2,373.3</b>	<b>\$ 252,838.0</b>	<b>\$ 2,652.9</b>	<b>\$ 2,608.9</b>

## Notes to Consolidated Financial Statements (unaudited) (continued)

Changes in the fair value of client-related and trading derivative instruments are recognized currently in income. The following table shows the location and amount of gains and losses recorded in the consolidated statements of income for the three and nine months ended September 30, 2016 and 2015.

**Table 60: Location and Amount of Client-Related and Trading Derivative Gains and Losses Recorded in Income**

(In Millions)	Location of Derivative Gain Recognized in Income	Amount of Derivative Gain Recognized in Income			
		Three Months Ended September 30,		Nine Months Ended September 30,	
		2016	2015	2016	2015
Foreign Exchange Contracts	Foreign Exchange Trading Income	\$ 53.6	\$ 62.9	\$ 178.5	\$ 209.3
Interest Rate Contracts	Security Commissions and Trading Income	2.6	5.0	9.7	12.9
Total		\$ 56.2	\$ 67.9	\$ 188.2	\$ 222.2

**Risk Management Instruments.** Northern Trust uses derivative instruments to hedge its exposure to foreign currency, interest rate, equity price, and credit risk. Certain hedging relationships are formally designated and qualify for hedge accounting under GAAP as fair value, cash flow or net investment hedges. Other derivatives that are entered into for risk management purposes as economic hedges are not formally designated as hedges and changes in fair value are recognized currently in other operating income.

In order to qualify for hedge accounting, a formal assessment is performed on a calendar-quarter basis to verify that derivatives used in designated hedging transactions continue to be highly effective in offsetting the changes in fair value or cash flows of the hedged item. If a derivative ceases to be highly effective, matures, is sold or is terminated, or if a hedged forecasted transaction is no longer probable of occurring, hedge accounting is terminated and the derivative is treated as if it were a trading instrument.

The following table identifies the types and classifications of derivative instruments formally designated as hedges under GAAP and used by Northern Trust to manage risk, their notional and fair values, and the respective risks addressed.

**Table 61: Notional and Fair Value of Designated Risk Management Derivative Financial Instruments**

(In Millions)	Derivative Instrument	Risk Classification	September 30, 2016			December 31, 2015		
			Notional Value	Fair Value		Notional Value	Fair Value	
				Asset	Liability		Asset	Liability
<b>Fair Value Hedges</b>								
Available for Sale Investment Securities	Interest Rate Swap Contracts	Interest Rate	\$ 3,776.1	\$ 4.3	\$ 40.1	\$ 3,042.1	\$ 10.8	\$ 19.8
Senior Notes and Long-Term Subordinated Debt	Interest Rate Swap Contracts	Interest Rate	1,250.0	146.1	3.0	1,250.0	104.6	2.2
<b>Cash Flow Hedges</b>								
Forecasted Foreign Currency Denominated Transactions	Foreign Exchange Contracts	Foreign Currency	348.6	8.9	9.0	367.4	8.5	13.8
Forecasted Foreign Currency Denominated Investment Securities	Foreign Exchange Contracts	Foreign Currency	1,302.7	0.4	(7.0)	—	—	—
Available for Sale Investment Securities	Interest Rate Contracts	Interest Rate	975.0	3.1	0.2	935.0	2.0	0.7
<b>Net Investment Hedges</b>								
Net Investments in Non-U.S. Affiliates	Foreign Exchange Contracts	Foreign Currency	2,215.6	87.4	42.1	1,961.5	72.9	1.5
Total			\$ 9,868.0	\$ 250.2	\$ 87.4	\$ 7,556.0	\$ 198.8	\$ 38.0

## Notes to Consolidated Financial Statements (unaudited) (continued)

Derivatives are designated as fair value hedges to limit Northern Trust's exposure to changes in the fair value of assets and liabilities due to movements in interest rates. For a fair value hedge, changes in the fair value of the derivative instrument and changes in the fair value of the hedged asset or liability attributable to the hedged risk are recorded currently in income. The following table shows the location and amount of derivative gains and losses recorded in the consolidated statements of income related to fair value hedges for the three and nine months ended September 30, 2016 and 2015.

**Table 62: Location and Amount of Fair Value Hedge Derivative Gains and Losses Recorded in Income**

(In Millions)	Derivative Instrument	Location of Derivative Gain/(Loss) Recognized in Income	Amount of Derivative Gain/(Loss) Recognized in Income			
			Three Months Ended September 30,		Nine Months Ended September 30,	
			2016	2015	2016	2015
Available for Sale Investment Securities	Interest Rate Swap Contracts	Interest Income	\$ 15.5	\$ (22.5)	\$ (44.3)	\$ (34.8)
Senior Notes and Long-Term Subordinated Debt	Interest Rate Swap Contracts	Interest Expense	(7.3)	43.7	63.7	45.8
Total			\$ 8.2	\$ 21.2	\$ 19.4	\$ 11.0

Northern Trust applies the “shortcut” method of accounting, available under GAAP, to substantially all of its fair value hedges, which assumes there is no ineffectiveness in a hedge. For fair value hedges that do not qualify for the “shortcut” method of accounting, Northern Trust utilizes regression analysis, the “long-haul” method of accounting, in assessing whether the hedging relationships are highly effective at inception and quarterly thereafter. There was no ineffectiveness or changes in the fair value of hedged items recognized in income for fair value hedges accounted for under the “long-haul” method of accounting during the three- and nine- month periods ended September 30, 2016 and 2015.

Derivatives are also designated as cash flow hedges in order to minimize the variability in cash flows of earning assets or forecasted transactions caused by movements in interest or foreign exchange rates. There was no ineffectiveness recognized in income for cash flow hedges during the three and nine months ended September 30, 2016 and 2015. As of September 30, 2016, 23 months was the maximum length of time over which the exposure to variability in future cash flows of forecasted foreign-currency-denominated transactions was being hedged.

The following table provides cash flow hedge derivative gains and losses recognized in AOCI and the amounts reclassified to income during the three and nine months ended September 30, 2016 and 2015.

**Table 63: Cash Flow Hedge Derivative Gains and Losses Recognized in AOCI and Reclassified to Income**

(In Millions)	Foreign Exchange Contracts (Before Tax)		Interest Rate Contracts (Before Tax)	
	2016	2015	2016	2015
	<b>Three Months Ended September 30,</b>			
Net Gain/(Loss) Recognized in AOCI	\$ (0.5)	\$ 1.8	\$ (5.9)	\$ 4.6
Net Gain/(Loss) Reclassified from AOCI to Net Income				
Other Operating Income	(6.8)	(1.0)	—	—
Interest Income	1.6	—	0.7	1.4
Other Operating Expense	(0.2)	(0.5)	—	—
Total	\$ (5.4)	\$ (1.5)	\$ 0.7	\$ 1.4
<b>Nine Months Ended September 30,</b>				
Net Gain/(Loss) Recognized in AOCI	\$ 1.7	\$ 0.4	\$ 1.9	\$ 6.1
Net Gain/(Loss) Reclassified from AOCI to Net Income				
Other Operating Income	(8.5)	(4.9)	—	—
Interest Income	1.6	—	2.5	3.8
Other Operating Expense	(0.7)	(1.3)	—	—
Total	\$ (7.6)	\$ (6.2)	\$ 2.5	\$ 3.8

## Notes to Consolidated Financial Statements (unaudited) (continued)

There were no gains or losses reclassified into earnings during the three and nine months ended September 30, 2016 and 2015, as a result of the discontinuance of forecasted transactions that were no longer probable of occurring. It is estimated that a net loss of \$0.7 million and \$6.7 million will be reclassified into net income within the next twelve months relating to cash flow hedges of foreign currency denominated transactions and cash flow hedges of foreign currency denominated investment securities. It is estimated that a net gain of \$1.6 million will be reclassified into net income upon the receipt of interest payments on earning assets within the next twelve months relating to cash flow hedges of available for sale investment securities.

Certain foreign exchange contracts and qualifying nonderivative instruments are designated as net investment hedges to minimize Northern Trust's exposure to variability in the foreign currency translation of net investments in non-U.S. branches and subsidiaries. There was no ineffectiveness recorded during the three and nine months ended September 30, 2016 and 2015. Amounts recorded in AOCI are reclassified to net income only upon the sale or liquidation of an investment in a non-U.S. branch or subsidiary.

The following table provides net investment hedge gains and losses recognized in AOCI during the three and nine months ended September 30, 2016 and 2015.

**Table 64: Net Investment Hedge Gains and Losses Recognized in AOCI**

(In Millions)	Hedging Gain / (Loss) Recognized in OCI (Before Tax)			
	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Foreign Exchange Contracts	\$ 4.1	\$ 49.1	\$ 87.6	\$ 79.6
Sterling Denominated Subordinated Debt	—	—	—	5.0
Total	\$ 4.1	\$ 49.1	\$ 87.6	\$ 84.6

Derivatives that are not formally designated as a hedge under GAAP are entered into for risk management purposes. Foreign exchange contracts are entered into to manage the foreign currency risk of non-U.S.-dollar-denominated assets and liabilities, the net investment in certain non-U.S. affiliates, commercial loans and forecasted foreign-currency-denominated transactions. Swaps related to sales of certain Visa Class B common shares were entered into which retains the risks associated with the ultimate conversion of the Visa Class B common shares into Visa Class A common shares. Credit default swaps were entered into to manage credit risk associated with certain loans and loan commitments. Total return swaps are entered into to manage the equity price risk associated with certain investments. The following table identifies the types of risk management derivative instruments not formally designated as hedges and their notional amounts and fair values.

**Table 65: Notional and Fair Values of Non-Designated Risk Management Derivative Instruments**

(In Millions)	September 30, 2016			December 31, 2015		
	Notional Value	Fair Value		Notional Value	Fair Value	
		Asset	Liability		Asset	Liability
Foreign Exchange Contracts	\$ 194.4	\$ 0.6	\$ 1.0	\$ 244.6	\$ 0.2	\$ 3.7
Other Financial Derivatives <sup>(1)</sup>	286.3	—	29.5	152.8	—	10.9
Total	\$ 480.7	\$ 0.6	\$ 30.5	\$ 397.4	\$ 0.2	\$ 14.6

<sup>(1)</sup> This line includes swaps related to sales of certain Visa Class B common shares and total return swap contracts.

## Notes to Consolidated Financial Statements (unaudited) (continued)

Changes in the fair value of derivative instruments not formally designated as hedges are recognized currently in income. The following table provides the location and amount of gains and losses recorded in the consolidated statements of income for the three and nine months ended September 30, 2016 and 2015.

**Table 66: Location and Amount of Gains and Losses Recorded in Income for Non-Designated Risk Management Derivative Instruments**

(In Millions)	Location of Derivative Gain / (Loss) Recognized in Income	Amount of Derivative Gain / (Loss) Recognized in Income			
		Three Months Ended September 30,		Nine Months Ended September 30,	
		2016	2015	2016	2015
Foreign Exchange Contracts	Other Operating Income	\$ (1.2)	\$ (6.3)	\$ (0.2)	\$ (8.4)
Other Financial Derivatives <sup>(1)</sup>	Other Operating Income	(2.3)	(0.2)	(8.6)	(0.2)
Total		\$ (3.5)	\$ (6.5)	\$ (8.8)	\$ (8.6)

<sup>(1)</sup> This line includes a swap related to sales of certain Visa Class B common shares, total return swap contracts, and credit default swap contracts.

## 21. Offsetting of Assets and Liabilities

The following tables provide information regarding the offsetting of derivative assets and securities purchased under agreements to resell within the consolidated balance sheets as of September 30, 2016 and December 31, 2015.

**Table 67: Offsetting of Derivative Assets and Securities Purchased Under Agreements to Resell**

September 30, 2016

(In Millions)	Gross Recognized Assets	Gross Amounts Offset	Net Amounts Presented	Gross Amounts Not Offset	Net Amount <sup>(3)</sup>
Derivative Assets <sup>(1)</sup>					
Foreign Exchange Contracts Over the Counter (OTC)	\$ 1,704.8	\$ 1,146.4	\$ 558.4	\$ —	\$ 558.4
Interest Rate Swaps OTC	224.3	14.9	209.4	—	209.4
Interest Rate Swaps Exchange Cleared	113.0	109.7	3.3	—	3.3
Cross Product Netting Adjustment	—	67.8	—	—	—
Cross Product Collateral Adjustment	—	339.0	—	—	—
Total Derivatives Subject to a Master Netting Arrangement	2,042.1	1,677.8	364.3	—	364.3
Total Derivatives Not Subject to a Master Netting Arrangement	623.6	—	623.6	—	623.6
Total Derivatives	\$ 2,665.7	\$ 1,677.8	\$ 987.9	\$ —	\$ 987.9
Securities Purchased under Agreements to Resell <sup>(2)</sup>	\$ 2,050.9	\$ —	\$ 2,050.9	\$ 2,050.9	\$ —



## Notes to Consolidated Financial Statements (unaudited) (continued)

December 31, 2015

(In Millions)	Gross Recognized Assets	Gross Amounts Offset	Net Amounts Presented	Gross Amounts Not Offset	Net Amount <sup>(3)</sup>
<b>Derivative Assets <sup>(1)</sup></b>					
Foreign Exchange Contracts OTC	\$ 1,636.0	\$ 1,194.3	\$ 441.7	\$ —	\$ 441.7
Interest Rate Swaps OTC	170.3	21.5	148.8	—	148.8
Interest Rate Swaps Exchange Cleared	58.2	38.1	20.1	—	20.1
Cross Product Netting Adjustment	—	23.5	—	—	—
Cross Product Collateral Adjustment	—	322.8	—	—	—
<b>Total Derivatives Subject to a Master Netting Arrangement</b>	<b>1,864.5</b>	<b>1,600.2</b>	<b>264.3</b>	<b>—</b>	<b>264.3</b>
<b>Total Derivatives Not Subject to a Master Netting Arrangement</b>	<b>987.4</b>	<b>—</b>	<b>987.4</b>	<b>—</b>	<b>987.4</b>
<b>Total Derivatives</b>	<b>2,851.9</b>	<b>1,600.2</b>	<b>1,251.7</b>	<b>—</b>	<b>1,251.7</b>
<b>Securities Purchased under Agreements to Resell <sup>(2)</sup></b>	<b>\$ 1,600.0</b>	<b>\$ —</b>	<b>\$ 1,600.0</b>	<b>\$ 1,600.0</b>	<b>\$ —</b>

<sup>(1)</sup> Derivative assets are reported in other assets in the consolidated balance sheets. Other assets (excluding derivative assets) totaled \$3.2 billion as of September 30, 2016 and December 31, 2015, respectively.

<sup>(2)</sup> Securities purchased under agreements to resell are reported in federal funds sold and securities purchased under agreements to resell in the consolidated balance sheets. Federal funds sold totaled \$15.1 million and \$14.2 million as of September 30, 2016 and December 31, 2015, respectively.

<sup>(3)</sup> Northern Trust did not possess any cash collateral that was not offset in the consolidated balance sheets that could have been used to offset the net amounts presented in the consolidated balance sheets as of September 30, 2016 and December 31, 2015.

The following tables provide information regarding the offsetting of derivative liabilities and securities sold under agreements to repurchase within the consolidated balance sheets as of September 30, 2016 and December 31, 2015.

**Table 68: Offsetting of Derivative Liabilities and Securities Sold Under Agreements to Repurchase**

September 30, 2016

(In Millions)	Gross Recognized Liabilities	Gross Amounts Offset	Net Amounts Presented	Gross Amounts Not Offset	Net Amount <sup>(2)</sup>
<b>Derivative Liabilities <sup>(1)</sup></b>					
Foreign Exchange Contracts OTC	\$ 1,981.2	\$ 1,146.4	\$ 834.8	\$ —	\$ 834.8
Interest Rate Swaps OTC	115.4	14.9	100.5	—	100.5
Interest Rate Swaps Exchange Cleared	109.7	109.7	—	—	—
Other Financial Derivatives	29.5	—	29.5	—	29.5
Cross Product Netting Adjustment	—	67.8	—	—	—
Cross Product Collateral Adjustment	—	768.5	—	—	—
<b>Total Derivatives Subject to a Master Netting Arrangement</b>	<b>2,235.8</b>	<b>2,107.3</b>	<b>128.5</b>	<b>—</b>	<b>128.5</b>
<b>Total Derivatives Not Subject to a Master Netting Arrangement</b>	<b>255.4</b>	<b>—</b>	<b>255.4</b>	<b>—</b>	<b>255.4</b>
<b>Total Derivatives</b>	<b>2,491.2</b>	<b>2,107.3</b>	<b>383.9</b>	<b>—</b>	<b>383.9</b>
<b>Securities Sold under Agreements to Repurchase</b>	<b>\$ 301.8</b>	<b>\$ —</b>	<b>\$ 301.8</b>	<b>\$ 301.8</b>	<b>\$ —</b>

## Notes to Consolidated Financial Statements (unaudited) (continued)

December 31, 2015

(In Millions)	Gross Recognized Liabilities	Gross Amounts Offset	Net Amounts Presented	Gross Amounts Not Offset	Net Amount <sup>(2)</sup>
<b>Derivative Liabilities <sup>(1)</sup></b>					
Foreign Exchange Contracts OTC	\$ 2,119.7	\$ 1,194.3	\$ 925.4	\$ —	\$ 925.4
Interest Rate Swaps OTC	93.1	21.5	71.6	—	71.6
Interest Rate Swaps Exchange Cleared	38.1	38.1	—	—	—
Other Financial Derivatives	10.9	—	10.9	—	10.9
Cross Product Netting Adjustment	—	23.5	—	—	—
Cross Product Collateral Adjustment	—	440.2	—	—	—
Total Derivatives Subject to a Master Netting Arrangement	2,261.8	1,717.6	544.2	—	544.2
Total Derivatives Not Subject to a Master Netting Arrangement	399.7	—	399.7	—	399.7
Total Derivatives	2,661.5	1,717.6	943.9	—	943.9
Securities Sold under Agreements to Repurchase	\$ 546.6	\$ —	\$ 546.6	\$ 546.6	\$ —

<sup>(1)</sup> Derivative liabilities are reported in other liabilities in the consolidated balance sheets. Other liabilities (excluding derivative liabilities) totaled \$2.8 billion and \$2.1 billion as of September 30, 2016 and December 31, 2015, respectively.

<sup>(2)</sup> Northern Trust did not place any cash collateral with counterparties that was not offset in the consolidated balance sheets that could have been used to offset the net amounts presented in the consolidated balance sheets as of September 30, 2016 and December 31, 2015.

All of Northern Trust's securities sold under agreements to repurchase (repurchase agreements) and securities purchased under agreements to resell (reverse repurchase agreements) involve the transfer of financial assets in exchange for cash subject to a right and obligation to repurchase those assets for an agreed upon amount. In the event of a repurchase failure, the cash or financial assets are available for offset. All of Northern Trust's repurchase agreements and reverse repurchase agreements are subject to a master netting arrangement, which sets forth the rights and obligations for repurchase and offset. Under the master netting arrangement, Northern Trust is entitled to set off receivables from and collateral placed with a single counterparty against obligations owed to that counterparty. In addition, collateral held by Northern Trust can be offset against receivables from that counterparty.

Derivative asset and liability positions with a single counterparty can be offset against each other in cases where legally enforceable master netting arrangements or similar agreements exist. Derivative assets and liabilities can be further offset by cash collateral received from, and deposited with, the transacting counterparty. The basis for this view is that, upon termination of transactions subject to a master netting arrangement or similar agreement, the individual derivative receivables do not represent resources to which general creditors have rights and individual derivative payables do not represent claims that are equivalent to the claims of general creditors. Northern Trust centrally clears those interest rate derivative instruments addressed under Title VII of the Dodd-Frank Wall Street Reform and Consumer Protection Act. These transactions are subject to an agreement similar to a master netting arrangement which has the same rights of offset as described above.

### Item 4. Controls and Procedures

As of September 30, 2016, the Corporation's management, with the participation of the Corporation's Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of the Corporation's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the Exchange Act)), that are designed to ensure that information required to be disclosed by the Corporation in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified by the SEC's rules and forms. Based on such evaluation, such officers have concluded that, as of September 30, 2016, the Corporation's disclosure controls and procedures are effective.

There have been no changes in the Corporation's internal control over financial reporting identified in connection with the evaluation required by Rules 13a-15 and 15d-15 under the Exchange Act during the last fiscal quarter that have materially affected, or that are reasonably likely to materially affect, the Corporation's internal control over financial reporting.

## PART II — OTHER INFORMATION

### Item 1. Legal Proceedings

The information presented under the caption “Legal Proceedings” in “Note 19 — Contingent Liabilities” included under Part I, Item 1 of this Form 10-Q is incorporated herein by reference.

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

(c) The following table shows certain information relating to the Corporation’s purchases of common stock for the three months ended September 30, 2016.

**Table 69: Repurchases of Common Stock**

<u>Period</u>	<u>Total Number of Shares Purchased</u>	<u>Average Price Paid per Share</u>	<u>Total Number of Shares Purchased as Part of a Publicly Announced Plan <sup>(1)</sup></u>	<u>Maximum Number of Shares that May Yet Be Purchased Under the Plan</u>
July 1-31, 2016	74,374	\$ 67.16	74,374	5,737,626
August 1-31, 2016	561,427	68.21	561,427	5,176,199
September 1-30, 2016	273,588	69.87	273,588	4,902,611
Total (Third Quarter)	909,389	\$ 68.62	909,389	4,902,611

<sup>(1)</sup> *Repurchases were made pursuant to the repurchase program announced by the Corporation on April 22, 2015, under which the Corporation’s board of directors authorized the Corporation to repurchase up to 15.0 million shares of the Corporation’s common stock. The repurchase program has no expiration date.*

### Item 6. Exhibits

A list of exhibits to this Form 10-Q is set forth on the Exhibit Index immediately preceding such exhibits and is incorporated herein by reference.



## EXHIBIT INDEX

<u>Exhibit Number</u>	<u>Description</u>
31.1	Rule 13a-14(a)/15d-14(a) Certification of CEO Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Rule 13a-14(a)/15d-14(a) Certification of CFO Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32	Certifications of CEO and CFO Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101	Includes the following financial and related information from Northern Trust's Quarterly Report on Form 10-Q as of and for the quarter ended September 30, 2016, formatted in Extensible Business Reporting Language (XBRL): (1) the Consolidated Balance Sheets as of September 30, 2016 and December 31, 2015, (2) the Consolidated Statements of Income for the three and nine months ended September 30, 2016 and 2015, (3) the Consolidated Statements of Comprehensive Income for the three and nine months ended September 30, 2016 and 2015, (4) the Consolidated Statements of Changes in Stockholders' Equity for the three and nine months ended September 30, 2016 and 2015, (5) the Consolidated Statements of Cash Flows for the three and nine months ended September 30, 2016 and 2015, and (6) Notes to Consolidated Financial Statements

**Certification of CEO Pursuant to  
Section 302 of the Sarbanes-Oxley Act of 2002**

I, Frederick H. Waddell, certify that:

1. I have reviewed this report on Form 10-Q for the quarterly period ended September 30, 2016, of Northern Trust Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 26, 2016

/s/ Frederick H. Waddell

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Frederick H. Waddell  
Chief Executive Officer  
(Principal Executive Officer)

**Certification of CFO Pursuant to  
Section 302 of the Sarbanes-Oxley Act of 2002**

I, S. Biff Bowman, certify that:

1. I have reviewed this report on Form 10-Q for the quarterly period ended September 30, 2016, of Northern Trust Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 26, 2016

/s/ S. Biff Bowman

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S. Biff Bowman

Chief Financial Officer

(Principal Financial Officer)

**Certifications of CEO and CFO Pursuant to  
18 U.S.C. Section 1350, as Adopted Pursuant to  
Section 906 of the Sarbanes-Oxley Act of 2002**

In connection with the Quarterly Report of Northern Trust Corporation (the "Corporation") on Form 10-Q for the period ended September 30, 2016, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Frederick H. Waddell, as Chief Executive Officer of the Corporation, and S. Biff Bowman, as Chief Financial Officer of the Corporation, each hereby certifies, pursuant to 18 U.S.C. section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002, to the best of his knowledge, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Corporation.

/s/ Frederick H. Waddell

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Frederick H. Waddell  
Chief Executive Officer  
(Principal Executive Officer)

Date: October 26, 2016

/s/ S. Biff Bowman

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S. Biff Bowman  
Chief Financial Officer  
(Principal Financial Officer)

Date: October 26, 2016

This certification accompanies the Report pursuant to section 906 of the Sarbanes-Oxley Act of 2002 and shall not be deemed filed by Northern Trust Corporation for purposes of section 18 of the Securities Exchange Act of 1934, as amended.