

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

FORM 10-Q

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

For the quarterly period ended September 30, 2024

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

Securities registered pursuant to Section 12(b) of the Act:

<u>Title of each class</u>	<u>Trading Symbol</u>	<u>Name of each exchange on which registered</u>
Common Stock, \$1.66 2/3 Par Value	NTRS	The NASDAQ Stock Market LLC
Depository Shares, each representing 1/1,000th interest in a share of Series E Non-Cumulative Perpetual Preferred Stock	NTRSO	The NASDAQ Stock Market LLC

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

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

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

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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

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

At September 30, 2024, 198,218,483 shares of common stock, \$1.66 2/3 par value, were outstanding.

NORTHERN TRUST CORPORATION
QUARTERLY REPORT ON FORM 10-Q
FOR THE QUARTERLY PERIOD ENDED SEPTEMBER 30, 2024

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**CONSOLIDATED FINANCIAL HIGHLIGHTS
(UNAUDITED)**

CONDENSED INCOME STATEMENTS (\$ In Millions)	THREE MONTHS ENDED SEPTEMBER 30,			NINE MONTHS ENDED SEPTEMBER 30,		
	2024	2023	% CHANGE ⁽¹⁾	2024	2023	% CHANGE ⁽¹⁾
Noninterest Income	\$ 1,406.2	\$ 1,270.3	11 %	\$ 4,717.5	\$ 3,729.3	26 %
Net Interest Income	562.3	456.2	23	1,613.3	1,498.9	8
Total Revenue	1,968.5	1,726.5	14	6,330.8	5,228.2	21
Provision for Credit Losses	8.0	14.0	(43)	7.5	13.5	(44)
Noninterest Expense	1,359.4	1,278.2	6	4,258.0	3,895.7	9
Income before Income Taxes	601.1	434.3	38	2,065.3	1,319.0	57
Provision for Income Taxes	136.2	106.5	28	489.6	324.8	51
Net Income	\$ 464.9	\$ 327.8	42 %	\$ 1,575.7	\$ 994.2	59 %
PER COMMON SHARE						
Net Income — Basic	\$ 2.23	\$ 1.49	49 %	\$ 7.53	\$ 4.56	65 %
— Diluted	2.22	1.49	49	7.51	4.56	65
Cash Dividends Declared Per Common Share	0.75	0.75	—	2.25	2.25	—
Book Value — End of Period (EOP)	59.85	52.95	13	59.85	52.95	13
Market Price — EOP	90.03	69.48	30	90.03	69.48	30

SELECTED BALANCE SHEET DATA (\$ In Millions)	SEPTEMBER 30, 2024	DECEMBER 31, 2023	% CHANGE ⁽¹⁾
<i>End of Period:</i>			
Total Assets	\$ 155,753.8	\$ 150,783.1	3 %
Earning Assets	142,731.1	140,369.6	2
Deposits	121,183.3	116,164.0	4
Stockholders' Equity	12,749.0	11,897.9	7

	THREE MONTHS ENDED SEPTEMBER 30,			NINE MONTHS ENDED SEPTEMBER 30,		
	2024	2023	% CHANGE ⁽¹⁾	2024	2023	% CHANGE ⁽¹⁾
<i>Average Balances:</i>						
Total Assets	\$ 146,842.9	\$ 140,201.6	5 %	\$ 146,654.8	\$ 144,691.6	1 %
Earning Assets	134,767.8	128,254.4	5	134,662.2	132,747.8	1
Deposits	112,560.7	101,763.1	11	112,754.2	106,477.7	6
Stockholders' Equity	12,474.1	11,536.6	8	12,206.5	11,423.2	7

CLIENT ASSETS (\$ In Billions)	SEPTEMBER 30, 2024	DECEMBER 31, 2023	% CHANGE ⁽¹⁾
Assets Under Custody/Administration ⁽²⁾	\$ 17,423.0	\$ 15,404.9	13 %
Assets Under Custody	13,794.8	11,916.5	16
Assets Under Management	1,621.8	1,434.5	13

N/M - Not meaningful

⁽¹⁾ Percentage calculations are based on actual balances rather than the rounded amounts presented in the table above.

⁽²⁾ 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 in this amount.

SELECTED RATIOS AND METRICS

	THREE MONTHS ENDED SEPTEMBER 30,		NINE MONTHS ENDED SEPTEMBER 30,			
	2024	2023	2024	2023		
<i>Financial Ratios:</i>						
Return on Average Common Equity	15.4 %	11.6 %	18.2 %	12.1 %		
Return on Average Assets	1.26	0.93	1.44	0.92		
Dividend Payout Ratio	33.8	50.3	30.0	49.4		
Net Interest Margin ⁽¹⁾	1.68	1.45	1.62	1.55		
	SEPTEMBER 30, 2024		DECEMBER 31, 2023			
	STANDARDIZED APPROACH	ADVANCED APPROACH	STANDARDIZED APPROACH	ADVANCED APPROACH	WELL-CAPITALIZED RATIOS	MINIMUM CAPITAL RATIOS
<i>Capital Ratios:</i>						
Northern Trust Corporation						
Common Equity Tier 1 Capital	12.6 %	14.0 %	11.4 %	13.4 %	N/A	4.5 %
Tier 1 Capital	13.6	15.1	12.3	14.5	6.0	6.0
Total Capital	15.6	17.0	14.2	16.5	10.0	8.0
Tier 1 Leverage	8.1	8.1	8.1	8.1	N/A	4.0
Supplementary Leverage	N/A	9.2	N/A	8.6	N/A	3.0
The Northern Trust Company						
Common Equity Tier 1 Capital	12.3 %	13.9 %	12.2 %	14.6 %	6.5 %	4.5 %
Tier 1 Capital	12.3	13.9	12.2	14.6	8.0	6.0
Total Capital	14.0	15.5	13.8	16.3	10.0	8.0
Tier 1 Leverage	7.3	7.3	8.0	8.0	5.0	4.0
Supplementary Leverage	N/A	8.2	N/A	8.5	3.0	3.0

⁽¹⁾ 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 in "Reconciliation to Fully Taxable Equivalent" within the "Management's Discussion and Analysis of Financial Condition and Results of Operations" section.

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

The following is management’s discussion and analysis of the financial condition and results of operations (MD&A) of Northern Trust Corporation (Corporation) for the third quarter of 2024. The following should be read in conjunction with the consolidated financial statements and related footnotes included in this report as well as the Annual Report on Form 10-K for the year ended December 31, 2023. Investors also should read the section titled “Forward-Looking Statements.”

Certain terms used in this report are defined in the Glossary included in our Annual Report on Form 10-K for the year ended December 31, 2023.

THIRD QUARTER CONSOLIDATED RESULTS OF OPERATIONS

General

The Corporation is a leading provider of wealth management, asset servicing, asset management and banking solutions to corporations, institutions, families and individuals. The Corporation focuses on managing and servicing client assets through its two client-focused reporting segments: Asset Servicing and Wealth Management. Asset management and related services are provided to Asset Servicing and Wealth Management clients primarily by the Asset Management business. Except where the context requires otherwise, the terms “Northern Trust,” “we,” “us,” “our,” “its,” or similar terms mean the Corporation and its subsidiaries on a consolidated basis.

Overview of Financial Results

Net Income per diluted common share was \$2.22 in the current quarter and \$1.49 in the third quarter of 2023. Net Income increased \$137.1 million to \$464.9 million in the current quarter from \$327.8 million in the prior-year quarter. Annualized return on average common equity was 15.4% in the current quarter and 11.6% in the prior-year quarter. The annualized return on average assets was 1.26% in the current quarter as compared to 0.93% in the prior-year quarter.

Revenue for the three months ended September 30, 2024 increased \$242.0 million, or 14%, to \$1.97 billion in the current quarter from \$1.73 billion in the prior-year quarter. The current-quarter results include a \$68.1 million pre-tax gain related to the sale of an equity investment (after-tax \$51.4 million), partially offset by mark-to-market activity on existing Visa Class B swap agreements, including a \$12.8 million expense related to litigation escrow funding, both recorded in Other Operating income. For further detail on the Visa transactions, refer to Note 20—Commitments and Contingent Liabilities.

Trust, Investment and Other Servicing Fees increased \$84.7 million, or 8%, from \$1.11 billion in the prior-year quarter to \$1.20 billion in the current quarter, primarily due to favorable markets.

Other Noninterest Income increased \$51.2 million, or 32%, from \$158.4 million in the prior-year quarter to \$209.6 million in the current quarter. The increase in Other Noninterest Income in the current quarter was primarily driven by the current quarter gain on the sale of an equity investment, partially offset by mark-to-market activity on existing Visa Class B swap agreements and a decrease in banking and credit-related service fees.

Net Interest Income increased \$106.1 million, or 23%, to \$562.3 million in the current quarter as compared to \$456.2 million in the prior-year quarter, primarily driven by higher deposits, securities repositioning, and a higher than average impact of other items, partially offset by a decrease in the loan portfolio.

In the current quarter, there was a Provision for Credit Losses of \$8.0 million, as compared to a Provision for Credit Losses of \$14.0 million in the prior-year quarter. For additional information, refer to the Provision for Credit Losses within the “Third Quarter Consolidated Results of Operations” section.

Noninterest Expense increased \$81.2 million, or 6%, from \$1.28 billion in the prior-year quarter to \$1.36 billion in the current quarter, primarily due to higher Compensation expense, higher software amortization and software support expense, higher Outside Services expense, and higher Employee Benefits expense, partially offset by a decrease in Other Operating Expense.

The Provision for Income Taxes in the current quarter totaled \$136.2 million, representing an effective tax rate of 22.7%. The Provision for Income Taxes in the prior-year quarter totaled \$106.5 million, representing an effective tax rate of 24.5%.

Trust, Investment and Other Servicing Fees

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 calculations on which fees are based are performed on a monthly or quarterly basis in arrears.

The components of Trust, Investment and Other Servicing Fees are provided below.

THIRD QUARTER CONSOLIDATED RESULTS OF OPERATIONS (continued)

Trust, Investment and Other Servicing Fees (continued)

TABLE 1: TRUST, INVESTMENT AND OTHER SERVICING FEES

(\$ In Millions)	THREE MONTHS ENDED SEPTEMBER 30,				
	2024	2023	CHANGE		
Asset Servicing Trust, Investment and Other Servicing Fees					
Custody and Fund Administration	\$ 453.1	\$ 428.1	\$ 25.0	6 %	
Investment Management	152.6	137.1	15.5	11	
Securities Lending	17.5	20.4	(2.9)	(14)	
Other	43.9	40.4	3.5	8	
Total Asset Servicing Trust, Investment and Other Servicing Fees	\$ 667.1	\$ 626.0	\$ 41.1	7 %	
Wealth Management Trust, Investment and Other Servicing Fees					
Central	\$ 186.6	\$ 172.3	\$ 14.3	8 %	
East	136.4	126.1	10.3	8	
West	105.7	95.8	9.9	10	
Global Family Office	100.8	91.7	9.1	10	
Total Wealth Management Trust, Investment and Other Servicing Fees	\$ 529.5	\$ 485.9	\$ 43.6	9 %	
Total Consolidated Trust, Investment and Other Servicing Fees	\$ 1,196.6	\$ 1,111.9	\$ 84.7	8 %	

Asset Servicing

Custody and Fund Administration fees, the largest component of Asset Servicing fees, are driven primarily by values of client assets under custody/administration (AUC/A), transaction volumes and the 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 month-end market values, quarter-end market values, or the average of month-end market values for the quarter. The fund administration fees that are asset-value-related are priced using month-end, quarter-end, or average daily balances. Investment Management fees are based generally on market values of client AUM throughout the period. Typically, the asset values used to calculate fee revenue are based on a one-month or one-quarter lag. Securities Lending revenue is affected by market values; the demand for securities to be lent, which drives volumes; and the interest rate spread earned on the investment of cash deposited by investment firms as collateral for securities they have borrowed. The Other fee category in Asset Servicing includes such products as investment risk and analytical services, benefit payments, and other services. Revenue from these products is based generally on the volume of services provided or a fixed fee.

Custody and Fund Administration fees increased from the prior-year quarter, primarily due to favorable markets and favorable currency translation. Investment Management fees increased from the prior-year quarter, primarily due to favorable markets and new business.

Wealth Management

Wealth Management fee income is calculated primarily based on market values and is impacted by both one-month and one-quarter lagged asset values. Fee income in the regions increased from the prior-year quarter, primarily due to favorable markets. Global Family Office fee income increased from the prior-year quarter, primarily due to favorable markets and asset inflows.

Market Indices

The following tables present selected market indices and the percentage changes year-over-year to provide context regarding equity and fixed income market impacts on the Corporation's results.

TABLE 2: EQUITY MARKET INDICES

	DAILY AVERAGES			PERIOD-END		
	THREE MONTHS ENDED SEPTEMBER 30,			AS OF SEPTEMBER 30,		
	2024	2023	CHANGE	2024	2023	CHANGE
S&P 500	5,542	4,458	24 %	5,762	4,288	34 %
MSCI EAFE (U.S. dollars)	2,378	2,113	13	2,469	2,031	22
MSCI EAFE (local currency)	1,507	1,346	12	1,524	1,331	14

TABLE 3: FIXED INCOME MARKET INDICES

	AS OF SEPTEMBER 30,		
	2024	2023	CHANGE
Barclays Capital U.S. Aggregate Bond Index	2,258	2,024	12 %
Barclays Capital Global Aggregate Bond Index	488	436	12

THIRD QUARTER CONSOLIDATED RESULTS OF OPERATIONS (continued)

Trust, Investment and Other Servicing Fees (continued)

Client Assets

As noted above, AUC/A and assets under management (AUM) are two of 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 in this amount. The following table presents AUC/A by reporting segment.

TABLE 4: ASSETS UNDER CUSTODY / ADMINISTRATION BY REPORTING SEGMENT

(\$ In Billions)	SEPTEMBER 30, 2024		JUNE 30, 2024		SEPTEMBER 30, 2023		CHANGE Q3-24/ Q2-24	CHANGE Q3-24/ Q3-23
Asset Servicing	\$	16,278.0	\$	15,470.8	\$	13,206.2	5 %	23 %
Wealth Management		1,145.0		1,096.6		958.5	4	19
Total Assets Under Custody / Administration	\$	17,423.0	\$	16,567.4	\$	14,164.7	5 %	23 %

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

TABLE 5: ASSETS UNDER CUSTODY BY REPORTING SEGMENT

(\$ In Billions)	SEPTEMBER 30, 2024		JUNE 30, 2024		SEPTEMBER 30, 2023		CHANGE Q3-24/ Q2-24	CHANGE Q3-24/ Q3-23
Asset Servicing	\$	12,662.1	\$	11,955.5	\$	10,064.4	6 %	26 %
Wealth Management		1,132.7		1,085.9		951.0	4	19
Total Assets Under Custody	\$	13,794.8	\$	13,041.4	\$	11,015.4	6 %	25 %

Consolidated assets under custody increased from the prior quarter, primarily reflecting favorable markets and favorable currency translation, partially offset by client asset outflows. Consolidated assets under custody increased from the prior-year quarter, primarily reflecting the impact of favorable markets, client asset inflows, and favorable currency translation.

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

TABLE 6: ALLOCATION OF ASSETS UNDER CUSTODY

	SEPTEMBER 30, 2024			JUNE 30, 2024			SEPTEMBER 30, 2023		
	AS	WM	TOTAL	AS	WM	TOTAL	AS	WM	TOTAL
Equities	48 %	62 %	50 %	48 %	62 %	49 %	46 %	58 %	47 %
Fixed Income Securities	31	13	29	31	13	29	33	13	31
Cash and Other Assets	20	25	20	20	25	21	19	29	21
Securities Lending Collateral	1	—	1	1	—	1	2	—	1

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

TABLE 7: ASSETS UNDER CUSTODY BY INVESTMENT TYPE

(\$ In Billions)	SEPTEMBER 30, 2024		JUNE 30, 2024		SEPTEMBER 30, 2023		CHANGE Q3-24/Q2-24	CHANGE Q3-24/Q3-23
Equities	\$	6,799.5	\$	6,381.0	\$	5,141.4	7 %	32 %
Fixed Income Securities		4,031.7		3,801.2		3,445.0	6	17
Cash and Other Assets		2,787.5		2,698.5		2,267.0	3	23
Securities Lending Collateral		176.1		160.7		162.0	10	9
Total Assets Under Custody	\$	13,794.8	\$	13,041.4	\$	11,015.4	6 %	25 %

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

TABLE 8: ASSETS UNDER MANAGEMENT BY REPORTING SEGMENT

(\$ In Billions)	SEPTEMBER 30, 2024		JUNE 30, 2024		SEPTEMBER 30, 2023		CHANGE Q3-24/Q2-24	CHANGE Q3-24/Q3-23
Asset Servicing	\$	1,177.9	\$	1,107.3	\$	963.4	6 %	22 %
Wealth Management		443.9		419.4		369.9	6	20
Total Assets Under Management	\$	1,621.8	\$	1,526.7	\$	1,333.3	6 %	22 %

Consolidated assets under management increased compared to the prior quarter, primarily reflecting favorable markets and client asset inflows. Consolidated assets under management increased compared to the prior-year quarter, primarily reflecting the impact of favorable markets.

THIRD QUARTER CONSOLIDATED RESULTS OF OPERATIONS (continued)

Trust, Investment and Other Servicing Fees (continued)

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

TABLE 9: ALLOCATION OF ASSETS UNDER MANAGEMENT

	SEPTEMBER 30, 2024			JUNE 30, 2024			SEPTEMBER 30, 2023		
	AS	WM	TOTAL	AS	WM	TOTAL	AS	WM	TOTAL
Equities	55 %	58 %	56 %	55 %	58 %	56 %	53 %	53 %	53 %
Fixed Income Securities	11	20	13	11	20	14	11	22	14
Cash and Other Assets	19	22	20	19	22	19	19	25	21
Securities Lending Collateral	15	—	11	15	—	11	17	—	12

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

TABLE 10: ASSETS UNDER MANAGEMENT BY INVESTMENT TYPE

(\$ In Billions)	SEPTEMBER 30, 2024	JUNE 30, 2024	SEPTEMBER 30, 2023	CHANGE Q3-24/Q2-24	CHANGE Q3-24/Q3-23
Equities	\$ 908.8	\$ 856.9	\$ 706.5	6 %	29 %
Fixed Income Securities	219.7	211.6	190.2	4	15
Cash and Other Assets	317.2	297.5	274.6	7	16
Securities Lending Collateral	176.1	160.7	162.0	10	9
Total Assets Under Management	\$ 1,621.8	\$ 1,526.7	\$ 1,333.3	6 %	22 %

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

TABLE 11: ACTIVITY IN CONSOLIDATED ASSETS UNDER MANAGEMENT BY PRODUCT

THREE MONTHS ENDED

(In Billions)	SEPTEMBER 30, 2024	JUNE 30, 2024	MARCH 31, 2024	DECEMBER 31, 2023	SEPTEMBER 30, 2023
Beginning Balance of AUM	\$ 1,526.7	\$ 1,500.7	\$ 1,434.5	\$ 1,333.3	\$ 1,365.8
Inflows by Product					
Equities	42.8	49.6	38.3	59.9	49.5
Fixed Income	16.3	21.8	15.3	17.3	15.0
Cash and Other Assets	672.9	655.8	629.5	619.3	565.2
Securities Lending Collateral	68.6	57.2	75.8	64.0	54.6
Total Inflows	800.6	784.4	758.9	760.5	684.3
Outflows by Product					
Equities	(43.9)	(53.5)	(47.7)	(56.0)	(54.6)
Fixed Income	(15.3)	(18.2)	(14.6)	(17.9)	(12.4)
Cash and Other Assets	(649.8)	(648.5)	(605.0)	(617.1)	(559.5)
Securities Lending Collateral	(53.2)	(59.8)	(80.0)	(58.6)	(61.4)
Total Outflows	(762.2)	(780.0)	(747.2)	(749.6)	(687.9)
Net Inflows (Outflows)	38.4	4.4	11.7	10.9	(3.6)
Market Performance, Currency & Other					
Market Performance & Other	56.7	22.3	58.8	12.6	(24.1)
Currency	—	(0.7)	(4.2)	77.7	(4.8)
Total Market Performance, Currency & Other	56.7	21.6	54.6	90.3	(28.9)
Ending Balance of AUM	\$ 1,621.8	\$ 1,526.7	\$ 1,500.7	\$ 1,434.5	\$ 1,333.3

THIRD QUARTER CONSOLIDATED RESULTS OF OPERATIONS (continued)

Other Noninterest Income

The components of Other Noninterest Income are provided below.

TABLE 12: OTHER NONINTEREST INCOME

(\$ In Millions)	THREE MONTHS ENDED SEPTEMBER 30,			
	2024	2023	CHANGE	
Foreign Exchange Trading Income	\$ 54.1	\$ 51.8	\$ 2.3	4 %
Treasury Management Fees	8.2	7.5	0.7	9
Security Commissions and Trading Income	35.5	30.9	4.6	15
Other Operating Income	111.8	68.2	43.6	64
Total Other Noninterest Income	\$ 209.6	\$ 158.4	\$ 51.2	32%

N/M - Not meaningful

Other Operating Income increased compared to the prior-year quarter, primarily driven by a \$68.1 million gain on the sale of an equity investment in the current quarter, partially offset by higher expenses related to existing Visa Class B swap agreements, including \$12.8 million related to litigation escrow funding in the current quarter, and a decrease in banking and credit-related service fees.

Net Interest Income

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. Earning assets—including Federal Funds Sold, Securities Purchased under Agreements to Resell, Interest-Bearing Due From and Deposits with Banks, Federal Reserve and Other Central Bank Deposits, Securities, Loans, and Other Interest-Earning Assets—are financed by a large base of interest-bearing liabilities that include client deposits, short-term borrowings, Senior Notes and Long-Term Debt. Short-term borrowings include Federal Funds Purchased, Securities Sold Under Agreements to Repurchase, and Other Borrowings. Earning assets are also funded by noninterest-bearing funds, which include demand deposits and stockholders' equity. Net Interest Income is subject to variations in the level and mix of earning assets and interest-bearing funds and their relative sensitivity to interest rates. In addition, the levels of nonaccruing assets and client compensating deposit balances used to pay for services impact Net Interest Income.

Net interest margin is the difference between what we earn on our assets and what we pay for deposits and other sources of funding. The direction and level of interest rates are important factors in our earnings. Net interest margin is calculated by dividing annualized Net Interest Income by average interest-earning assets.

Net Interest Income stated on a fully taxable equivalent (FTE) basis is a non-generally accepted accounting principle (GAAP) financial measure that facilitates the analysis of asset yields. Management believes an FTE presentation provides a clearer indication of net interest margins 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. A reconciliation of Net Interest Income on a GAAP basis to Net Interest Income on an FTE basis is provided in "Reconciliation to Fully Taxable Equivalent" within this MD&A.

THIRD QUARTER CONSOLIDATED RESULTS OF OPERATIONS (continued)

Net Interest Income (continued)

The following tables present an analysis of average daily balances and interest rates affecting Net Interest Income and an analysis of Net Interest Income changes.

TABLE 13: AVERAGE CONSOLIDATED BALANCE SHEETS WITH ANALYSIS OF NET INTEREST INCOME

(\$ In Millions)	THIRD QUARTER					
	2024			2023		
	INTEREST	AVERAGE BALANCE	AVERAGE RATE ⁽⁷⁾	INTEREST	AVERAGE BALANCE	AVERAGE RATE ⁽⁷⁾
Interest-Earning Assets						
Federal Reserve and Other Central Bank Deposits	\$ 451.7	\$ 36,067.3	4.98 %	\$ 352.1	\$ 28,000.8	4.99 %
Interest-Bearing Due from and Deposits with Banks ⁽¹⁾	28.5	4,828.1	2.35	34.9	4,301.4	3.22
Federal Funds Sold	—	0.2	5.64	—	1.2	5.62
Securities Purchased under Agreements to Resell ⁽²⁾	890.8	977.2	362.66	463.9	950.8	193.58
Debt Securities						
Available for Sale	379.8	27,462.6	5.50	277.9	24,430.7	4.51
Held to Maturity	107.8	22,834.0	1.88	125.2	25,919.2	1.93
Trading Account	—	—	—	0.1	0.4	21.15
Total Debt Securities	487.6	50,296.6	3.86	403.2	50,350.3	3.18
Loans ⁽³⁾	646.5	39,884.0	6.45	665.5	42,210.4	6.26
Other Interest-Earning Assets ⁽⁴⁾	32.2	2,714.4	4.71	28.6	2,439.5	4.65
Total Interest-Earning Assets	2,537.3	134,767.8	7.49	1,948.2	128,254.4	6.03
Cash and Due from Banks and Other Central Bank Deposits ⁽⁵⁾	—	1,742.3	—	—	1,694.6	—
Other Noninterest-Earning Assets	—	10,332.8	—	—	10,252.6	—
Total Assets	\$ —	\$ 146,842.9	— %	\$ —	\$ 140,201.6	— %
Average Source of Funds						
Deposits						
Savings, Money Market and Other	\$ 238.6	\$ 25,233.0	3.76 %	\$ 173.9	\$ 22,624.9	3.05 %
Savings Certificates and Other Time	86.7	6,639.6	5.19	43.3	3,665.2	4.69
Non-U.S. Offices — Interest-Bearing	548.2	64,347.2	3.39	499.4	58,680.5	3.38
Total Interest-Bearing Deposits	873.5	96,219.8	3.61	716.6	84,970.6	3.35
Federal Funds Purchased	29.6	2,320.9	5.07	77.5	5,935.9	5.18
Securities Sold under Agreements to Repurchase ⁽²⁾	869.7	504.3	686.17	454.0	426.0	422.85
Other Borrowings ⁽⁶⁾	94.8	7,085.9	5.32	154.8	10,981.7	5.59
Senior Notes	44.2	2,795.6	6.30	44.1	2,713.2	6.44
Long-Term Debt	56.1	4,075.1	5.47	31.8	2,126.9	5.94
Total Interest-Bearing Liabilities	1,967.9	113,001.6	6.93	1,478.8	107,154.3	5.48
Interest Rate Spread	—	—	0.56	—	—	0.55
Demand and Other Noninterest-Bearing Deposits	—	16,340.9	—	—	16,792.5	—
Other Noninterest-Bearing Liabilities	—	5,026.3	—	—	4,718.2	—
Stockholders' Equity	—	12,474.1	—	—	11,536.6	—
Total Liabilities and Stockholders' Equity	\$ —	\$ 146,842.9	— %	\$ —	\$ 140,201.6	— %
Net Interest Income/Margin (FTE Adjusted)	\$ 569.4	\$ —	1.68 %	\$ 469.4	\$ —	1.45 %
Net Interest Income/Margin (Unadjusted)	\$ 562.3	\$ —	1.66 %	\$ 456.2	\$ —	1.41 %

⁽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⁾ Includes the impact of balance sheet netting under master netting arrangements of approximately \$64.3 billion and \$33.5 billion for the three months ended September 30, 2024 and 2023, respectively. Excluding the impact of netting for the three months ended September 30, 2024 and 2023, the average interest rate on Securities Purchased under Agreements to Resell would be approximately 5.43% and 5.34%, respectively. Excluding the impact of netting for the three months ended September 30, 2024 and 2023, the average interest rate on Securities Sold under Agreements to Repurchase would be approximately 5.34% and 5.30%, respectively. Northern Trust nets securities sold under repurchase agreements against those purchased under resale agreements when there is a legally enforceable master netting agreement.

⁽³⁾ Average balances include nonaccrual loans.

⁽⁴⁾ Other Interest-Earning Assets include certain community development investments, collateral deposits with certain securities depositories and clearing houses, Federal Home Loan Bank and Federal Reserve stock, and money market investments which are classified in Other Assets on the consolidated balance sheets.

⁽⁵⁾ Cash and Due from Banks and Other Central Bank Deposits includes the noninterest-bearing component of Federal Reserve and Other Central Bank Deposits on the consolidated balance sheets.

⁽⁶⁾ Other Borrowings primarily includes advances from the Federal Home Loan Bank of Chicago.

⁽⁷⁾ Rate calculations are based on actual balances rather than the rounded amounts presented in the table above.

THIRD QUARTER CONSOLIDATED RESULTS OF OPERATIONS (continued)

Net Interest Income (continued)

TABLE 14: ANALYSIS OF NET INTEREST INCOME CHANGES DUE TO VOLUME AND RATE⁽¹⁾

(INTEREST AND RATE ON A FULLY TAXABLE EQUIVALENT BASIS)

THREE MONTHS ENDED SEPTEMBER 30, 2024 VS. 2023

(In Millions)	CHANGE DUE TO		
	AVERAGE BALANCE	AVERAGE RATE	NET (DECREASE) INCREASE
Increase (Decrease) in Net Interest Income (FTE)			
Federal Reserve and Other Central Bank Deposits	\$ 100.3	\$ (0.7)	\$ 99.6
Interest-Bearing Due from and Deposits with Banks	3.9	(10.3)	(6.4)
Federal Funds Sold	—	—	—
Securities Purchased under Agreements to Resell	7.7	419.2	426.9
Debt Securities			
Available for Sale	14.1	87.8	101.9
Held to Maturity	(14.3)	(3.1)	(17.4)
Trading Account	(0.1)	—	(0.1)
Total Debt Securities	(0.3)	84.7	84.4
Loans	(38.3)	19.3	(19.0)
Other Interest-Earning Assets	3.2	0.4	3.6
Total Interest Income	\$ 76.5	\$ 512.6	\$ 589.1
Interest-Bearing Deposits			
Savings, Money Market and Other	\$ 21.4	\$ 43.3	\$ 64.7
Savings Certificates and Other Time	38.4	5.0	43.4
Non-U.S. Offices - Interest-Bearing	47.3	1.5	48.8
Total Interest-Bearing Deposits	107.1	49.8	156.9
Federal Funds Purchased	(46.3)	(1.6)	(47.9)
Securities Sold under Agreements to Repurchase	50.0	365.7	415.7
Other Borrowings	(52.8)	(7.2)	(60.0)
Senior Notes	1.2	(1.1)	0.1
Long-Term Debt	27.0	(2.7)	24.3
Total Interest Expense	\$ 86.2	\$ 402.9	\$ 489.1
Increase (Decrease) in Net Interest Income (FTE)	\$ (9.7)	\$ 109.7	\$ 100.0

⁽¹⁾ Changes not due solely to average balance changes or rate changes are allocated proportionately to average balance and rate based on their relative absolute magnitudes.

Changes due to average rates includes the impact of balance sheet netting as noted in Table 13: Average Consolidated Balance Sheets with Analysis of Net Interest Income. Notes: Net Interest Income (FTE), a non-GAAP financial measure, includes adjustments to a fully taxable equivalent basis for loans, securities and other interest-earning assets. The adjustments are based on a federal income tax rate of 21.0%, where the rate is adjusted for applicable state income taxes, net of related federal tax benefit. Total taxable equivalent interest adjustments amounted to \$7.1 million and \$13.2 million for the three months ended September 30, 2024 and 2023, 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 in "Reconciliation to Fully Taxable Equivalent" within this MD&A. Net interest margin is calculated by dividing annualized Net Interest Income by average interest-earning assets.

Interest Income on cash collateral positions is reported above in Interest-Bearing Due from and Deposits with Banks, Loans and in Other Interest-Earning Assets. Interest Expense on cash collateral positions is reported above in Savings, Money Market and Other and in Non-U.S. Offices Interest-Bearing Deposits. Where it can be netted, related cash collateral received from and deposited with derivative counterparties is recorded net of the associated derivative contract in Other Assets and Other Liabilities, respectively.

Net Interest Income, stated on an FTE basis, increased from the prior-year quarter, primarily driven by higher deposits, securities repositioning, and a higher than average impact of other items, partially offset by a decrease in the loan portfolio. Average earning assets increased from the prior-year quarter, primarily driven by an increase in deposits, partially offset by a decrease in borrowing activity.

Federal Reserve and Other Central Bank Deposits averaged \$36.1 billion and increased \$8.1 billion, or 29%, from \$28.0 billion in the prior-year quarter. Interest-Bearing Due from and Deposits with Banks averaged \$4.8 billion and increased \$0.5 billion, or 12%, from \$4.3 billion in the prior-year quarter.

Average Securities were \$50.3 billion and decreased \$0.1 billion, from \$50.4 billion in the prior-year quarter. Average taxable Securities were \$44.0 billion in the current quarter and \$47.4 billion in the prior-year quarter. Average nontaxable Securities, which represent securities that are primarily exempt from U.S. federal and state income taxes, were \$6.3 billion in the current quarter and \$3.0 billion in the prior-year quarter.

Securities Purchased under Agreements to Resell averaged \$977.2 million and increased \$26.4 million, or 3%, from \$950.8 million in the prior-year quarter. The increase in Securities Purchased under Agreements to Resell interest income and

THIRD QUARTER CONSOLIDATED RESULTS OF OPERATIONS (continued)

Net Interest Income (continued)

expense is primarily driven by sponsored member program activity due to increased client demand and wider spreads with the market presenting consistent opportunities to achieve higher rates.

Loans averaged \$39.9 billion and decreased \$2.3 billion, or 6%, from \$42.2 billion in the prior-year quarter, primarily reflecting lower levels of Non-U.S. loans and other loans, partially offset by average loan increases in commercial and institutional, residential real estate, private client, and commercial real estate loans. Non-U.S. loans averaged \$3.3 billion and decreased \$126.8 million, or 4%, from \$3.4 billion for the prior-year quarter. Private client loans averaged \$15.8 billion and increased \$1.8 billion, or 13%, from \$14.0 billion for the prior-year quarter. Commercial and institutional loans averaged \$14.4 billion and increased \$2.0 billion, or 16%, from \$12.4 billion for the prior-year quarter. Residential real estate loans averaged \$6.5 billion and increased \$149.4 million, or 2%, from \$6.4 billion for the prior-year quarter. Commercial real estate loans averaged \$5.9 billion and increased \$914.0 million, or 18%, from \$5.0 billion for the prior-year quarter.

Average Other Interest-Earning Assets include collateral deposits with certain securities depositories and clearing houses, certain community development investments, Federal Home Loan Bank stock, a money market investment, and Federal Reserve stock of \$1.4 billion, \$836.7 million, \$342.7 million, \$94.3 million, and \$70.0 million, respectively, which are recorded in Other Assets on the consolidated balance sheets.

Northern Trust utilizes a diverse mix of funding sources. Average Interest-Bearing Deposits increased \$11.2 billion, or 13%, to an average of \$96.2 billion in the current quarter from \$85.0 billion in the prior-year quarter. Interest expense for Interest-Bearing Deposits in the current quarter was driven by higher deposit costs. Average Non-U.S. Offices Interest-Bearing Deposits comprised 67% and 69% of total average Interest-Bearing Deposits for the three months ended September 30, 2024 and 2023, respectively. Average other interest-bearing liabilities decreased \$5.4 billion, or 24%, to an average of \$16.8 billion in the current quarter from \$22.2 billion in the prior-year quarter. 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.

Provision for Credit Losses

In the current quarter, there was a Provision for Credit Losses of \$8.0 million, as compared to a Provision for Credit Losses of \$14.0 million in the prior-year quarter. The Provision for Credit Losses in the current quarter resulted from an increase in both the collective and individual reserves. The increase in collective reserves was primarily driven by a small number of downgrades and extensions in the Commercial and Institutional (C&I) portfolio. The reserve evaluated on a collective basis relates to pooled financial assets sharing similar risk characteristics. The increase in individual reserves was driven by the default of one C&I loan.

The Provision for Credit Losses in the prior-year quarter was primarily due to an increase in the reserve evaluated on a collective basis, driven by a small number of large new loans and renewals and credit quality deterioration of certain Commercial Real Estate (CRE) and C&I loans, partially offset by a net improvement in the overall macroeconomic outlook.

Net recoveries in the current quarter were \$2.4 million, reflecting \$2.4 million of recoveries and de minimis charge-offs. The prior-year quarter included \$0.3 million net recoveries, reflecting \$1.1 million of recoveries and \$0.8 million of charge-offs.

For additional discussion of the allowance for credit losses, refer to the “Asset Quality” section in this MD&A.

Noninterest Expense

The components of Noninterest Expense are provided in the following table.

TABLE 15: NONINTEREST EXPENSE

(\$ In Millions)	THREE MONTHS ENDED SEPTEMBER 30,			
	2024	2023	CHANGE	
Compensation	\$ 583.6	\$ 558.1	\$ 25.5	5 %
Employee Benefits	109.2	100.8	8.4	8
Outside Services	256.3	229.6	26.7	12
Equipment and Software	270.4	232.5	37.9	16
Occupancy	53.8	58.7	(4.9)	(8)
Other Operating Expense	86.1	98.5	(12.4)	(13)
Total Noninterest Expense	\$ 1,359.4	\$ 1,278.2	\$ 81.2	6 %

Compensation expense, the largest component of Noninterest Expense, increased compared to the prior-year quarter, primarily due to higher base pay adjustments.

THIRD QUARTER CONSOLIDATED RESULTS OF OPERATIONS (continued)

Noninterest Expense (continued)

Employee Benefits expense increased compared to the prior-year quarter, primarily driven by higher medical costs.

Outside Services expense increased compared to the prior-year quarter, primarily due to an increase in consulting services.

Equipment and Software expense increased compared to the prior-year quarter, primarily due to higher software amortization and higher software support and rental expense.

Other Operating Expense decreased compared to the prior-year quarter, primarily due to a decrease in account servicing activities and the impact of reclassifying the amortization of certain investments from Other Operating Expense to the Provision for Income Taxes, in accordance with a new accounting standard that took effect in 2024.

Provision for Income Taxes

Income tax expense for the three months ended September 30, 2024 was \$136.2 million, representing an effective tax rate of 22.7%, compared to \$106.5 million in the prior-year quarter, representing an effective tax rate of 24.5%.

The effective tax rate decreased compared to the prior-year quarter primarily due to higher current year benefits.

NINE-MONTH CONSOLIDATED RESULTS OF OPERATIONS

Overview of Financial Results

Net Income per diluted common share increased in the current period to \$7.51 from \$4.56 in the prior-year period. Net Income increased \$581.5 million, or 59%, to \$1.58 billion in the current period from \$994.2 million in the prior-year period. Annualized return on average common equity was 18.2% in the current period and 12.1% in the prior-year period. The annualized return on average assets was 1.44% in the current period compared to 0.92% in the prior-year period.

Revenue for the nine months ended September 30, 2024 increased \$1.1 billion from \$5.23 billion in the prior-year period to \$6.33 billion in the current period. The increase was driven by a \$878.4 million net gain related to the Visa transactions in the second quarter of 2024, as well as a \$68.1 million pre-tax gain related to the sale of an equity investment (after-tax \$51.4 million) in the third quarter of 2024, recorded in Other Operating Income, partially offset by a \$189.4 million loss on the sale of available for sale debt securities recognized in the first quarter of 2024, recorded in Investment Security Gains (Losses), net. For further detail on the Visa transactions, refer to Note 20—Commitments and Contingent Liabilities.

Trust, Investment and Other Servicing Fees increased \$233.8 million, or 7%, from \$3.27 billion in the prior-year period to \$3.51 billion in the current period, primarily driven by favorable markets and net new business.

Other Noninterest Income increased \$754.4 million or 165%, from \$457.5 million in the prior-year period to \$1.21 billion in the current period, primarily driven by the net gain related to the Visa transactions in the second quarter of 2024 as well as the current quarter gain on the sale of an equity investment, partially offset by the loss on the sale of available for sale debt securities recognized in the first quarter of 2024.

Net Interest Income increased \$114.4 million, or 8%, from \$1.5 billion in the prior-year period to \$1.61 billion in the current period, primarily due to higher client deposits and securities repositioning, partially offset by higher funding costs in the first half of the year and a decrease in the loan portfolio.

There was a \$7.5 million Provision for Credit Losses in the current period, as compared to a \$13.5 million Provision for Credit Losses in the prior-year period. For additional information, refer to the Provision for Credit Losses within “Third Quarter Consolidated Results of Operations” section.

Noninterest Expense increased \$362.3 million, or 9%, from \$3.90 billion in the prior-year period to \$4.26 billion in the current period, primarily attributable to higher severance-related charges recorded in Compensation expense, higher Other Operating Expense, higher Equipment and Software expense, and higher Outside Services expense, partially offset by lower Occupancy Expense.

The Provision for Income Taxes for the nine months ended September 30, 2024 totaled \$489.6 million, representing an effective tax rate of 23.7%. The Provision for Income Taxes for the nine months ended September 30, 2023 totaled \$324.8 million, representing an effective tax rate of 24.6%.

Trust, Investment and Other Servicing Fees

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 calculations on which fees are based are performed on a monthly or quarterly basis in arrears. The components of Trust, Investment and Other Servicing Fees are provided in the table below.

NINE-MONTH CONSOLIDATED RESULTS OF OPERATIONS (continued)

Trust, Investment and Other Servicing Fees (continued)

TABLE 16: TRUST, INVESTMENT AND OTHER SERVICING FEES

(\$ In Millions)	NINE MONTHS ENDED SEPTEMBER 30,			
	2024	2023	CHANGE	
Asset Servicing Trust, Investment and Other Servicing Fees				
Custody and Fund Administration	\$ 1,335.7	\$ 1,269.1	\$ 66.6	5 %
Investment Management	438.3	397.4	40.9	10
Securities Lending	51.9	61.0	(9.1)	(15)
Other	131.4	122.7	8.7	7
Total Asset Servicing Trust, Investment and Other Servicing Fees	\$ 1,957.3	\$ 1,850.2	\$ 107.1	6 %
Wealth Management Trust, Investment and Other Servicing Fees				
Central	\$ 545.6	\$ 501.9	\$ 43.7	9 %
East	399.0	370.0	29.0	8
West	308.9	280.7	28.2	10
Global Family Office	294.8	269.0	25.8	10
Total Wealth Management Trust, Investment and Other Servicing Fees	\$ 1,548.3	\$ 1,421.6	\$ 126.7	9 %
Total Consolidated Trust, Investment and Other Servicing Fees	\$ 3,505.6	\$ 3,271.8	\$ 233.8	7 %

Asset Servicing

Custody and Fund Administration fees, increased from the prior-year period, primarily driven by favorable markets and net new business. Investment Management fees increased from the prior-year period, primarily due to favorable markets and new business. Securities Lending decreased from the prior-year period, primarily driven by lower spreads. The Other fees increased from the prior-year period, primarily due to new business.

Wealth Management

Fee income in the regions (Central, East and West) increased from the prior-year period, primarily due to favorable markets. Global Family Office fee income increased from the prior-year period, primarily due to favorable markets and asset inflows.

Other Noninterest Income

The components of other noninterest income are provided in the following table.

TABLE 17: OTHER NONINTEREST INCOME

(\$ In Millions)	NINE MONTHS ENDED SEPTEMBER 30,			
	2024	2023	CHANGE	
Foreign Exchange Trading Income	\$ 169.5	\$ 154.9	\$ 14.6	9 %
Treasury Management Fees	26.5	23.8	2.7	11
Security Commissions and Trading Income	107.7	101.7	6.0	6
Other Operating Income	1,097.5	170.2	927.3	N/M
Investment Security Gains (Losses), net	(189.3)	6.9	(196.2)	N/M
Total Other Noninterest Income	\$ 1,211.9	\$ 457.5	\$ 754.4	165 %

N/M - Not meaningful

Foreign Exchange Trading Income increased from the prior-year period, primarily driven by higher client volumes.

Other Operating Income increased from the prior-year period primarily driven by the \$878.4 million gain related to the net impact from the Visa transactions in the second quarter of 2024 and the current quarter gain of \$68.1 million on the sale of an equity investment, partially offset by losses recognized in the second quarter of 2024 as a result of securities repositioning related to the supplemental pension plan and impairment charges taken on certain investments.

Investment Security Gains (Losses), net reflects the \$189.4 million loss on the sale of available for sale debt securities in the current period as compared to the \$6.9 million gain on the sale of available for sale debt securities in the prior-year, each arising from a repositioning of the portfolio.

NINE-MONTH CONSOLIDATED RESULTS OF OPERATIONS (continued)

Net Interest Income

The following tables present an analysis of average daily balances and interest rate changes affecting Net Interest Income and an analysis of Net Interest Income changes.

TABLE 18: AVERAGE CONSOLIDATED BALANCE SHEETS WITH ANALYSIS OF NET INTEREST INCOME

(INTEREST AND RATE ON A FULLY TAXABLE EQUIVALENT BASIS)	NINE MONTHS ENDED SEPTEMBER 30,					
	2024			2023		
	INTEREST	AVERAGE BALANCE	AVERAGE RATE ⁽⁷⁾	INTEREST	AVERAGE BALANCE	AVERAGE RATE ⁽⁷⁾
(\$ In Millions)						
Interest-Earning Assets						
Federal Reserve and Other Central Bank Deposits	\$ 1,369.0	\$ 35,963.2	5.08 %	\$ 1,128.0	\$ 32,976.0	4.57 %
Interest-Bearing Due from and Deposits with Banks ⁽¹⁾	94.5	4,748.9	2.66	95.2	4,358.2	2.92
Federal Funds Sold	—	0.4	5.64	0.3	7.9	4.89
Securities Purchased under Agreements to Resell ⁽²⁾	2,578.2	743.2	463.40	874.1	1,078.2	108.40
Debt Securities						
Available for Sale	1,067.8	26,039.7	5.48	767.3	24,655.4	4.16
Held to Maturity	345.0	23,566.3	1.96	341.5	25,453.6	1.79
Trading Account	—	—	—	0.1	0.6	14.27
Total Debt Securities	1,412.8	49,606.0	3.80	1,108.9	50,109.6	2.96
Loans ⁽³⁾	1,953.0	40,831.6	6.39	1,885.5	42,179.2	5.98
Other Interest-Earning Assets ⁽⁴⁾	96.1	2,768.9	4.63	72.9	2,038.7	4.78
Total Interest-Earning Assets	7,503.6	134,662.2	7.44	5,164.9	132,747.8	5.20
Cash and Due from Banks and Other Central Bank Deposits ⁽⁵⁾	—	1,781.1	—	—	1,777.3	—
Other Noninterest-Earning Assets	—	10,211.5	—	—	10,166.5	—
Total Assets	\$ —	\$ 146,654.8	— %	\$ —	\$ 144,691.6	— %
Average Source of Funds						
Deposits						
Savings, Money Market and Other	\$ 748.9	\$ 26,706.9	3.75 %	\$ 484.7	\$ 24,268.0	2.67 %
Savings Certificates and Other Time	223.9	5,743.7	5.21	96.9	3,025.2	4.28
Non-U.S. Offices — Interest-Bearing	1,680.7	63,774.2	3.52	1,333.1	61,032.3	2.92
Total Interest-Bearing Deposits	2,653.5	96,224.8	3.68	1,914.7	88,325.5	2.90
Federal Funds Purchased	101.9	2,659.3	5.12	205.2	5,561.6	4.93
Securities Sold under Agreements to Repurchase ⁽²⁾	2,535.1	522.9	647.56	843.5	413.9	272.45
Other Borrowings ⁽⁶⁾	278.7	6,997.6	5.32	446.3	11,478.1	5.20
Senior Notes	132.4	2,757.8	6.41	125.4	2,740.7	6.12
Long-Term Debt	167.4	4,071.1	5.49	91.4	2,087.9	5.85
Total Interest-Related Funds	5,869.0	113,233.5	6.92	3,626.5	110,607.7	4.38
Interest Rate Spread	—	—	0.52	—	—	0.82
Demand and Other Noninterest-Bearing Deposits	—	16,529.4	—	—	18,152.2	—
Other Noninterest-Bearing Liabilities	—	4,685.4	—	—	4,508.5	—
Stockholders' Equity	—	12,206.5	—	—	11,423.2	—
Total Liabilities and Stockholders' Equity	\$ —	\$ 146,654.8	— %	\$ —	\$ 144,691.6	— %
Net Interest Income/Margin (FTE Adjusted)	\$ 1,634.6	\$ —	1.62 %	\$ 1,538.4	\$ —	1.55 %
Net Interest Income/Margin (Unadjusted)	\$ 1,613.3	\$ —	1.60 %	\$ 1,498.9	\$ —	1.51 %

⁽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⁾ Includes the impact of balance sheet netting under master netting arrangements of approximately \$62.5 billion and \$21.7 billion for the nine months ended September 30, 2024 and 2023, respectively. Excluding the impact of netting for the nine months ended September 30, 2024 and 2023, the average interest rate on Securities Purchased under Agreements to Resell would be approximately 5.45% and 5.13%, respectively. Excluding the impact of netting for the nine months ended September 30, 2024 and 2023, the average interest rate on Securities Sold under Agreements to Repurchase would be approximately 5.37% and 5.10%, respectively. Northern Trust nets securities sold under repurchase agreements against those purchased under resale agreements when there is a legally enforceable master netting agreement.

⁽³⁾ Average balances include nonaccrual loans.

⁽⁴⁾ Other Interest-Earning Assets include certain community development investments, collateral deposits with certain securities depositories and clearing houses, Federal Home Loan Bank and Federal Reserve stock, and money market investments which are classified in Other Assets on the consolidated balance sheets.

⁽⁵⁾ Cash and Due from Banks and Other Central Bank Deposits includes the noninterest-bearing component of Federal Reserve and Other Central Bank Deposits on the consolidated balance sheets.

⁽⁶⁾ Other Borrowings primarily includes advances from the Federal Home Loan Bank of Chicago.

⁽⁷⁾ Rate calculations are based on actual balances rather than the rounded amounts presented in the table above.

NINE-MONTH CONSOLIDATED RESULTS OF OPERATIONS (continued)

Net Interest Income (continued)

TABLE 19: ANALYSIS OF NET INTEREST INCOME CHANGES DUE TO VOLUME AND RATE⁽¹⁾

(In Millions)	NINE MONTHS ENDED SEPTEMBER 30, 2024 vs. 2023		
	CHANGE DUE TO		NET (DECREASE) INCREASE
	AVERAGE BALANCE	AVERAGE RATE	
Increase (Decrease) in Net Interest Income (FTE)			
Federal Reserve and Other Central Bank Deposits	\$ 108.0	\$ 133.0	\$ 241.0
Interest-Bearing Due from and Deposits with Banks	8.2	(8.9)	(0.7)
Federal Funds Sold	(0.3)	—	(0.3)
Securities Purchased under Agreements to Resell	(19.2)	1,723.3	1,704.1
Debt Securities			
Available For Sale	45.2	255.3	300.5
Held To Maturity	(48.2)	51.7	3.5
Trading Account	(0.2)	0.1	(0.1)
Total Debt Securities	(3.2)	307.1	303.9
Loans	(60.8)	128.3	67.5
Other Interest-Earning Assets	25.5	(2.3)	23.2
Total Interest Income	\$ 58.2	\$ 2,280.5	\$ 2,338.7
Interest-Bearing Deposits			
Savings, Money Market and Other	\$ 52.6	\$ 211.6	\$ 264.2
Savings Certificates and Other Time	102.2	24.8	127.0
Non-U.S. Offices - Interest-Bearing	62.3	285.3	347.6
Total Interest-Bearing Deposits	217.1	521.7	738.8
Federal Funds Purchased	(110.7)	7.4	(103.3)
Securities Sold under Agreements to Repurchase	84.9	1,606.7	1,691.6
Other Borrowings	(178.0)	10.4	(167.6)
Senior Notes	0.8	6.2	7.0
Long-Term Debt	81.9	(5.9)	76.0
Total Interest Expense	\$ 96.0	\$ 2,146.5	\$ 2,242.5
(Decrease) Increase in Net Interest Income (FTE)	\$ (37.8)	\$ 134.0	\$ 96.2

⁽¹⁾ Changes not due solely to average balance changes or rate changes are allocated proportionately to average balance and rate based on their relative absolute magnitudes. Changes due to average rates includes the impact of balance sheet netting as noted in Table 18: Average Consolidated Balance Sheets with Analysis of Net Interest Income.

Notes: Net Interest Income (FTE Adjusted), a non-GAAP financial measure, includes adjustments to a fully taxable equivalent basis for loans and securities. The adjustments are based on a federal income tax rate of 21.0%, where the rate is adjusted for applicable state income taxes, net of related federal tax benefit. Total taxable equivalent interest adjustments amounted to \$21.3 million and \$39.5 million for the nine months ended September 30, 2024 and 2023, 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 in "Reconciliation to Fully Taxable Equivalent" within this MD&A. Net interest margin is calculated by dividing annualized net interest income by average interest-earning assets.

Interest Income on cash collateral positions is reported above in Interest-Bearing Due from and Deposits with Banks, Loans and in Other Interest-Earning Assets. Interest Expense on cash collateral positions is reported above in Savings, Money Market and Other and in Non-U.S. Offices Interest-Bearing Deposits. Where it can be netted, related cash collateral received from and deposited with derivative counterparties is recorded net of the associated derivative contract in Other Assets and Other Liabilities, respectively.

Net Interest Income, stated on an FTE basis, increased from the prior-year period, primarily driven by higher deposits, securities repositioning, and a higher than average impact of other items, partially offset by higher funding costs and a decrease in the loan portfolio. Average earning assets increased from the prior-year period primarily due to higher client deposits and the proceeds from the sale of Visa shares in the second quarter of 2024.

The net interest margin on an FTE basis increased from the prior-year period, primarily driven by higher deposits and securities repositioning, partially offset by higher funding costs.

Federal Reserve and Other Central Bank Deposits averaged \$36.0 billion and increased \$3.0 billion, or 9%, from \$33.0 billion in the prior-year period. Interest-Bearing Due from and Deposits with Banks averaged \$4.7 billion in the current period and \$4.4 billion in the prior-year period.

Average Securities were \$49.6 billion and decreased \$0.5 billion, or 1%, from \$50.1 billion in the prior-year period. Average taxable securities were \$43.7 billion in the current period and \$47.1 billion in the prior-year period. Average nontaxable securities, which represent securities that are primarily exempt from U.S. federal and state income taxes, were \$5.9 billion in the current period and \$3.0 billion in the prior-year period.

Securities Purchased under Agreements to Resell averaged \$743.2 million, a decrease of \$335.0 million, or 31%, from \$1.1 billion in the prior-year period. The increase in Securities Purchased under Agreements to Resell interest income and expense is

NINE-MONTH CONSOLIDATED RESULTS OF OPERATIONS (continued)

Net Interest Income (continued)

primarily driven by sponsored member program activity due to increased client demand and wider spreads with the market presenting consistent opportunities to achieve higher rates.

Loans averaged \$40.8 billion and decreased \$1.3 billion, or 3%, from \$42.2 billion in the prior-year period, primarily reflecting lower levels of commercial and institutional, non-U.S., and residential real estate, partially offset by higher levels of commercial real estate and private loans. Commercial and institutional loans averaged \$11.2 billion and decreased \$1.4 billion, or 11%, from \$12.6 billion for the prior-year period. Non-U.S. loans averaged \$3.0 billion and decreased \$462.8 million, or 13%, from \$3.4 billion for the prior-year period. Residential real estate loans averaged \$6.3 billion and decreased \$141.3 million, or 2%, from \$6.4 billion for the prior-year period. Commercial real estate loans averaged \$5.3 billion and increased \$384.3 million, or 8%, from \$4.9 billion for the prior-year period. Private client loans averaged \$14.1 billion and increased \$226.7 million, or 2%, from \$13.9 billion for the prior-year period.

Average Other Interest-Earning Assets include collateral deposits with certain securities depositories and clearing houses, certain community development investments, Federal Home Loan Bank stock, a money market investment, and Federal Reserve stock of \$1.5 billion, \$856.7 million, \$332.5 million, \$94.8 million, and \$70.0 million respectively, which are recorded in Other Assets on the consolidated balance sheets.

Northern Trust utilizes a diverse mix of funding sources. Average Interest-Bearing Deposits increased \$7.9 billion, or 9%, to an average of \$96.2 billion in the current period from \$88.3 billion in the prior-year period. Other average interest-related funding decreased \$5.3 billion, to an average of \$17.0 billion in the current period from \$22.3 billion in the prior-year period. 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.

Interest expense for Interest-Bearing Deposits in the current period was driven by higher deposit costs. Average non-U.S. offices interest-bearing deposits comprised 66% and 69% of total average interest-bearing deposits for the nine months ended September 30, 2024 and 2023, respectively.

Provision for Credit Losses

There was a Provision for Credit Losses of \$7.5 million for the nine months ended September 30, 2024, as compared to a \$13.5 million provision in the prior-year period. The provision in the current-year period was primarily due to an increase in collective reserves, partially offset by a decrease in individual reserves. The increase in collective reserves was primarily driven by a small number of downgrades and extensions in the C&I portfolio and by expectations for weaker prices in the CRE portfolio. The decrease in individual reserves was driven by one C&I loan charge-off in the first quarter, partially offset by the default of one C&I loan in the current quarter.

The provision in the prior-year period was primarily due to an increase in the collective reserve, driven by new loans and renewals in the CRE portfolio and expectations of higher economic stress in the CRE market, particularly office CRE, partially offset by a net improvement in the overall macroeconomic outlook and lower loss projections for certain large C&I loans.

Net charge-offs in the current-year period totaled \$7.9 million resulting from \$11.4 million of charge-offs and \$3.5 million of recoveries, compared to net charge-offs of \$2.6 million in the prior-year period resulting from \$5.6 million of charge-offs and \$3.0 million of recoveries.

For additional discussion of the allowance for credit losses, refer to the "Asset Quality" section in this MD&A.

Noninterest Expense

The components of Noninterest Expense are provided in the following table.

TABLE 20: NONINTEREST EXPENSE

(\$ In Millions)	NINE MONTHS ENDED SEPTEMBER 30,			
	2024	2023	CHANGE	
Compensation	\$ 1,875.9	\$ 1,757.8	\$ 118.1	7 %
Employee Benefits	310.5	303.2	7.3	2
Outside Services	746.5	671.3	75.2	11
Equipment and Software	800.6	693.5	107.1	15
Occupancy	162.7	173.8	(11.1)	(6)
Other Operating Expense	361.8	296.1	65.7	22
Total Noninterest Expense	\$ 4,258.0	\$ 3,895.7	\$ 362.3	9 %

Compensation expense, the largest component of Noninterest Expense increased compared to the prior-year period, primarily due to higher severance-related charges, higher salary related expenses, and higher incentives.

NINE-MONTH CONSOLIDATED RESULTS OF OPERATIONS (continued)

Noninterest Expense (continued)

Employee Benefits expense increased compared to the prior-year period, primarily driven by higher medical costs.

Outside Services expense increased compared to the prior-year period, primarily reflecting higher technical services and higher consulting services.

Equipment and Software expense increased compared to the prior-year period, primarily due to higher software disposition charges in the second quarter of 2024, as well as higher software amortization, and higher software support expense.

Occupancy expense decreased compared to the prior-year period, primarily due to charges of \$12.8 million related to early lease exits recorded during the prior-year period.

Other Operating Expense increased compared to the prior-year period, primarily due to a \$70.0 million charitable contribution and \$10.6 million legal settlement recorded in the second quarter of 2024 and \$14.7 million of additional expense related to the FDIC special assessment in the current period, partially offset by the \$25.6 million charge related to the write-off of an investment in a client capability in the prior-year period.

Provision for Income Taxes

Income tax expense for the nine months ended September 30, 2024 was \$489.6 million, representing an effective tax rate of 23.7%, compared to \$324.8 million for the nine months ended September 30, 2023, representing an effective tax rate of 24.6%.

The effective tax rate decreased compared to the prior-year period primarily due to higher current-year benefits.

REPORTING SEGMENTS

Northern Trust is organized around its two client-focused reporting segments: Asset Servicing and Wealth Management. Asset management and related services are provided to Asset Servicing 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 Asset Servicing and Wealth Management.

Reporting segment financial information, presented on an internal management-reporting basis, is determined by accounting systems used to allocate revenue and expense to each segment, and incorporates processes for allocating assets, liabilities, equity and the applicable interest income and expense utilizing a funds transfer pricing (FTP) methodology. Under the methodology, assets and liabilities receive a funding charge or credit that considers interest rate risk, liquidity risk, and other product characteristics on an instrument level. Additionally, segment information is presented on an FTE basis as management believes an FTE presentation provides a clearer indication of net interest income. The adjustment to an FTE basis has no impact on Net Income.

Revenues, expenses and average assets are allocated to Asset Servicing and Wealth Management, with the exception of non-recurring activities such as certain corporate transactions and costs incurred associated with acquisitions, divestitures, litigation, restructuring, and tax adjustments not directly attributable to a specific reporting segment, which are reported within the Other segment.

Effective January 2024, Northern Trust implemented certain enhancements to its FTP methodology, impacting the allocation of Net Interest Income to the Asset Servicing and Wealth Management segments. As a result, the approximate impact on the Asset Servicing and Wealth Management segments was a \$36 million decrease and a \$36 million increase in Net Interest Income, respectively, for the three months ended September 30, 2024. The approximate impact on the Asset Servicing and Wealth Management segments was a \$99 million decrease and a \$99 million increase in Net Interest Income, respectively, for the nine months ended September 30, 2024. Prior-period segment results have not been revised to reflect this methodology change.

Reporting segment results are subject to reclassification when organizational changes are made. The results are also subject to refinements in revenue and expense allocation methodologies, which are typically reflected on a prospective basis. For further details, please refer to Note 9—Reporting Segments.

REPORTING SEGMENTS (continued)

The following table presents the earnings contributions and average assets of Northern Trust's reporting segments for the three- and nine-month periods ended September 30, 2024 and 2023.

TABLE 21: RESULTS OF REPORTING SEGMENTS

(\$ In Millions)	ASSET SERVICING		WEALTH MANAGEMENT		OTHER ⁽¹⁾		RECONCILING ITEMS		TOTAL CONSOLIDATED	
THREE MONTHS ENDED SEPTEMBER 30,	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023
Noninterest Income										
Trust, Investment and Other Servicing Fees	\$ 667.1	\$ 626.0	\$ 529.5	\$ 485.9	\$ —	\$ —	\$ —	\$ —	\$ 1,196.6	\$ 1,111.9
Foreign Exchange Trading Income (Loss)	59.5	54.3	(5.4)	(2.5)	—	—	—	—	54.1	51.8
Other Noninterest Income (Loss)	67.3	66.1	35.7	38.1	52.5	2.4	—	—	155.5	106.6
Total Noninterest Income (Loss)	793.9	746.4	559.8	521.5	52.5	2.4	—	—	1,406.2	1,270.3
Net Interest Income	321.4	281.2	248.0	188.2	—	—	(7.1)	(13.2)	562.3	456.2
Revenue	1,115.3	1,027.6	807.8	709.7	52.5	2.4	(7.1)	(13.2)	1,968.5	1,726.5
Provision for Credit Losses	(0.6)	3.1	12.4	10.9	(3.8)	—	—	—	8.0	14.0
Noninterest Expense	860.7	809.3	491.3	456.9	7.4	12.0	—	—	1,359.4	1,278.2
Income before Income Taxes	255.2	215.2	304.1	241.9	48.9	(9.6)	(7.1)	(13.2)	601.1	434.3
Provision for Income Taxes	57.1	54.3	75.1	67.7	11.1	(2.3)	(7.1)	(13.2)	136.2	106.5
Net Income	\$ 198.1	\$ 160.9	\$ 229.0	\$ 174.2	\$ 37.8	\$ (7.3)	\$ —	\$ —	\$ 464.9	\$ 327.8
Percentage of Consolidated Net Income	43 %	49 %	49 %	53 %	8 %	(2)%	N/A	N/A	100 %	100 %
Average Assets	\$108,108.0	\$108,656.7	\$38,734.9	\$31,544.9	\$ —	\$ —	N/A	N/A	\$146,842.9	\$140,201.6

⁽¹⁾ Includes the current quarter gain related to the sale of an equity investment.

(In Millions)	ASSET SERVICING		WEALTH MANAGEMENT		OTHER ⁽¹⁾		RECONCILING ITEMS		TOTAL CONSOLIDATED	
NINE MONTHS ENDED SEPTEMBER 30,	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023
Noninterest Income										
Trust, Investment and Other Servicing Fees	\$ 1,957.3	\$ 1,850.2	\$ 1,548.3	\$ 1,421.6	\$ —	\$ —	\$ —	\$ —	\$ 3,505.6	\$ 3,271.8
Foreign Exchange Trading Income (Loss)	181.6	161.2	(12.1)	(6.3)	—	—	—	—	169.5	154.9
Other Noninterest Income (Loss)	199.2	199.0	105.3	112.8	737.9	(9.2)	—	—	1,042.4	302.6
Total Noninterest Income (Loss)	2,338.1	2,210.4	1,641.5	1,528.1	737.9	(9.2)	—	—	4,717.5	3,729.3
Net Interest Income	900.5	902.6	734.1	635.8	—	—	(21.3)	(39.5)	1,613.3	1,498.9
Revenue	3,238.6	3,113.0	2,375.6	2,163.9	737.9	(9.2)	(21.3)	(39.5)	6,330.8	5,228.2
Provision for Credit Losses	(1.9)	(3.3)	15.7	16.8	(6.3)	—	—	—	7.5	13.5
Noninterest Expense	2,634.0	2,459.7	1,504.9	1,402.4	119.1	33.6	—	—	4,258.0	3,895.7
Income before Income Taxes	606.5	656.6	855.0	744.7	625.1	(42.8)	(21.3)	(39.5)	2,065.3	1,319.0
Provision for Income Taxes	146.1	167.4	223.0	207.5	141.8	(10.6)	(21.3)	(39.5)	489.6	324.8
Net Income	\$ 460.4	\$ 489.2	\$ 632.0	\$ 537.2	\$ 483.3	\$ (32.2)	\$ —	\$ —	\$ 1,575.7	\$ 994.2
Percentage of Consolidated Net Income	29 %	49 %	40 %	54 %	31 %	(3)%	N/A	N/A	100 %	100 %
Average Assets	\$108,025.6	\$110,380.4	\$38,629.2	\$34,311.2	\$ —	\$ —	N/A	N/A	\$146,654.8	\$144,691.6

⁽¹⁾ Includes the current quarter gain related to the sale of an equity investment. Includes the gain related to the net impact from the Visa transactions in the second quarter of 2024, refer to Note 20—Commitments and Contingent Liabilities for further information.

Note: Segment results are stated on an FTE basis. The FTE adjustments are eliminated in the reconciling items column with the Corporation's total consolidated financial results stated on a GAAP basis. The adjustment to an FTE basis has no impact on Net Income.

REPORTING SEGMENTS (continued)

Asset Servicing

Asset Servicing Net Income

For the quarter ended September 30, 2024, Net Income increased \$37.2 million, or 23%, from the prior-year quarter, primarily due to higher Net Interest Income and Trust, Investment and Other Servicing Fees, partially offset by higher Noninterest Expense. For the nine months ended September 30, 2024, Net Income decreased \$28.8 million, or 6%, from the prior-year period, primarily due to higher Noninterest Expense, partially offset by an increase in Trust, Investment and Other Servicing Fees.

Asset Servicing Trust, Investment and Other Servicing Fees

For an explanation of Asset Servicing Trust, Investment and Other Servicing Fees, please see the “Trust, Investment and Other Servicing Fees” section within the Consolidated Results of Operations section.

Asset Servicing Foreign Exchange Trading Income

For the three and nine months ended September 30, 2024, Foreign Exchange Trading Income increased \$5.2 million, or 10%, from the prior-year quarter and \$20.4 million, or 13%, from the prior-year period, primarily driven by higher client volumes.

Asset Servicing Net Interest Income

For the quarter ended September 30, 2024, Net Interest Income stated on an FTE basis increased \$40.2 million, or 14%, from the prior-year quarter, primarily driven by deposit balances and higher spreads, partially offset by the change in reporting segment allocation methodology beginning in 2024 noted above.

Asset Servicing Provision for Credit Losses

For the quarter ended September 30, 2024, there was a negative Provision for Credit Losses of \$0.6 million compared to a \$3.1 million Provision for Credit Losses in the prior-year quarter. The Provision for Credit Losses for the three months ended September 30, 2024 reflected a decrease in the collective and individual reserves. The decrease in collective reserve was primarily in the C&I portfolio. The decrease in individual reserves was driven by the paydown of one C&I loan.

For the nine months ended September 30, 2024, there was a negative Provision for Credit Losses of \$1.9 million compared to a \$3.3 million negative Provision for Credit Losses in the prior-year period. The Provision for Credit Losses for the nine months ended September 30, 2024 reflected a decrease in the individual reserve, partially offset by an increase in the collective reserve. The decrease in individual reserves was driven by one loan moved back to the collective reserve in the first quarter and the paydown of one C&I loan in the current quarter. The increase in collective reserve was primarily in the C&I portfolio, driven by a small number of downgrades.

Asset Servicing Noninterest Expense

For the three and nine months ended September 30, 2024, 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, increased \$51.4 million, or 6%, from the prior-year quarter primarily due to higher expense allocations, and \$174.3 million, or 7%, from the prior-year period primarily due to higher severance related-charges and higher expense allocations.

Wealth Management

Wealth Management Net Income

For the three and nine months ended September 30, 2024, Net Income increased \$54.8 million, or 31%, from the prior-year quarter and \$94.8 million, or 18%, from the prior-year period, primarily due to higher Trust, Investment and Other Servicing Fees and higher Net Interest Income, partially offset by higher Noninterest Expense.

Wealth Management Trust, Investment and Other Servicing Fees

For an explanation of Wealth Management Trust, Investment and Other Servicing Fees, please see the “Trust, Investment and Other Servicing Fees” section within the Consolidated Results of Operations section.

Wealth Management Foreign Exchange Trading Income

For the nine months ended September 30, 2024, Foreign Exchange Trading Income decreased \$5.8 million, or 92%, from the prior-year period primarily driven by lower allocations.

Wealth Management Other Noninterest Income

For the nine months ended September 30, 2024, Other Noninterest Income decreased \$7.5 million, or 7%, from the prior-year period primarily due to lower credit-related fees and swap fees.

REPORTING SEGMENTS (continued)

Wealth Management Net Interest Income

For the three and nine months ended September 30, 2024, Net Interest Income stated on an FTE basis increased \$59.8 million, or 32%, from the prior-year quarter and \$98.3 million, or 15%, from the prior-year period, primarily due to the change in reporting segment allocation methodology beginning in 2024 noted above and higher deposit balances.

Wealth Management Provision for Credit Losses

For the quarter ended September 30, 2024, there was a Provision for Credit Losses of \$12.4 million compared to a \$10.9 million Provision for Credit Losses in the prior-year quarter. The Provision for Credit Losses for the three months ended September 30, 2024 resulted from increases in both collective and individual reserves. The increase in collective reserve was primarily in the C&I portfolio, driven by a small number of downgrades and extensions. The increase in individual reserves was driven by the default of one C&I loan.

For the nine months ended September 30, 2024, there was a Provision for Credit Losses of \$15.7 million compared to a \$16.8 million Provision for Credit Losses in the prior-year period. The Provision for Credit Losses for the nine months ended September 30, 2024 reflected an increase in the collective reserve, partially offset by a decrease in the individual reserve. The increase in collective reserve was primarily driven by a small number of downgrades and extensions in the C&I portfolio and expectations for weaker prices in the CRE portfolio. The decrease in individual reserves was driven by one C&I loan that was charged off in the first quarter, partially offset by the default of one C&I loan in the current quarter.

Wealth Management Noninterest Expense

For the three and nine months ended September 30, 2024, Noninterest Expense, which includes the direct expenses of the reporting segment, indirect expense allocations for product and operating support and indirect expense allocations for certain corporate support services, increased \$34.4 million, or 8%, from the prior-year quarter and \$102.5 million, or 7%, from the prior-year period, primarily reflecting higher indirect expense allocations.

Other

Other—Noninterest Income

For the quarter ended September 30, 2024, Other Noninterest Income increased \$50.1 million from the prior-year quarter, primarily due to the gain related to the sale of an equity investment, partially offset by higher expenses related to existing Visa Class B swap agreements in the current quarter.

For the nine months ended September 30, 2024, Other Noninterest Income increased \$747.1 million from the prior-year period primarily due to the gain related to the net impact from the Visa transactions in the second quarter of 2024 and the current-quarter gain related to the sale of an equity investment, partially offset by the loss on sale of available for sale debt securities arising from a repositioning of the portfolio in the first quarter of 2024.

Other—Noninterest Expense

For the nine months ended September 30, 2024, Other Noninterest Expense increased \$85.5 million from the prior-year period, primarily due to the charitable contribution to the Northern Trust Foundation and a legal settlement in the prior quarter and additional expense related to the FDIC special assessment, partially offset by a decrease in non-allocated occupancy expense primarily arising from early lease exits.

CONSOLIDATED BALANCE SHEETS

The following tables summarize selected consolidated balance sheet information.

TABLE 22: SELECT CONSOLIDATED BALANCE SHEET INFORMATION

(\$ In Billions)	SEPTEMBER 30, 2024		DECEMBER 31, 2023		CHANGE		
Assets							
Federal Reserve and Other Central Bank Deposits	\$	40.8	\$	34.3	\$	6.5	19 %
Interest-Bearing Due from and Deposits with Banks ⁽¹⁾		5.5		5.3		0.2	4
Securities Purchased under Agreements to Resell		1.0		0.8		0.2	25
Total Debt Securities		51.0		49.3		1.7	3
Loans		42.0		47.6		(5.6)	(12)
Other Interest-Earning Assets ⁽²⁾		2.4		3.1		(0.7)	(21)
Total Earning Assets		142.7		140.4		2.3	2
Total Assets		155.8		150.8		5.0	3
Liabilities and Stockholders' Equity							
Total Interest-Bearing Deposits		99.0		93.3		5.7	6
Demand and Other Noninterest-Bearing Deposits		22.2		22.8		(0.6)	(3)
Federal Funds Purchased		2.8		3.0		(0.2)	(9)
Securities Sold under Agreements to Repurchase		0.2		0.8		(0.6)	(78)
Other Borrowings ⁽³⁾		6.9		6.6		0.3	5
Total Stockholders' Equity		12.7		11.9		0.8	7

⁽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 Interest-Earning Assets includes certain community development investments, collateral deposits with certain securities depositories and clearing houses, Federal Home Loan Bank and Federal Reserve stock, and money market investments which are classified in Other Assets on the consolidated balance sheets.

⁽³⁾ Other Borrowings primarily includes advances from the Federal Home Loan Bank of Chicago.

TABLE 23: SELECT AVERAGE CONSOLIDATED BALANCE SHEET INFORMATION

(\$ In Billions)	THREE MONTHS ENDED SEPTEMBER 30,				NINE MONTHS ENDED SEPTEMBER 30,									
	2024	2023	CHANGE		2024	2023	CHANGE							
Assets														
Federal Reserve and Other Central Bank Deposits	\$	36.1	\$	28.0	\$	8.1	29 %	\$	36.0	\$	33.0	\$	3.0	9 %
Interest-Bearing Due from and Deposits with Banks ⁽¹⁾		4.8		4.3		0.5	12		4.7		4.4		0.3	9
Securities Purchased under Agreements to Resell		1.0		1.0		—	3		0.7		1.1		(0.4)	(31)
Total Debt Securities		50.3		50.4		(0.1)	—		49.6		50.1		(0.5)	(1)
Loans		39.9		42.2		(2.3)	(6)		40.8		42.2		(1.4)	(3)
Other Interest-Earning Assets ⁽²⁾		2.7		2.4		0.3	11		2.8		2.0		0.8	36
Total Earning Assets		134.8		128.3		6.5	5		134.6		132.8		1.8	1
Total Assets		146.8		140.2		6.6	5		146.7		144.7		2.0	1
Liabilities and Stockholders' Equity														
Total Interest-Bearing Deposits		96.2		85.0		11.2	13		96.2		88.3		7.9	9
Demand and Other Noninterest-Bearing Deposits		16.3		16.8		(0.5)	(3)		16.5		18.2		(1.7)	(9)
Federal Funds Purchased		2.3		5.9		(3.6)	(61)		2.7		5.6		(2.9)	(52)
Securities Sold under Agreements to Repurchase		0.5		0.4		0.1	18		0.5		0.4		0.1	26
Other Borrowings ⁽³⁾		7.1		11.0		(3.9)	(35)		7.0		11.5		(4.5)	(39)
Total Stockholders' Equity		12.5		11.5		1.0	8		12.2		11.4		0.8	7

⁽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 Interest-Earning Assets includes certain community development investments, collateral deposits with certain securities depositories and clearing houses, Federal Home Loan Bank and Federal Reserve stock, and money market investments which are classified in Other Assets on the consolidated balance sheets.

⁽³⁾ Other Borrowings primarily includes advances from the Federal Home Loan Bank of Chicago.

Average balances are considered to be a better measure of balance sheet trends, as period-end balances can be impacted by the timing of deposit and withdrawal activity involving large client balances. Average earning assets increased from the prior-year quarter, primarily due to higher client deposits. Average earning assets were relatively unchanged compared to the prior-year period.

Select Earning Assets. Average securities decreased from the prior-year quarter and the prior-year period reflecting the impact of repositioning and reinvesting in short-term and long-term securities. For additional discussion relating to the securities

CONSOLIDATED BALANCE SHEETS (continued)

portfolio, refer to the “Asset Quality” section in this MD&A and to Note 4—Securities to the consolidated financial statements provided in Item 1. Consolidated Financial Statements (unaudited).

Client Deposits. Average Interest-Bearing Deposits increased in both the the prior-year quarter and prior-year period primarily due to an increase in client balances as a result of strategic pricing actions. Demand and Other Noninterest-Bearing Deposits decreased in both the prior-year quarter and prior-year period as clients migrated into higher yield products.

Short-Term Borrowings. Short-term borrowings includes Federal Funds Purchased, Securities Sold under Agreements to Repurchase, and Other Borrowings. The decrease in average Other Borrowings from the prior-year quarter and prior-year period was primarily due to strategic utilization of balance sheet capacity.

Stockholders’ Equity. During the three and nine months ended September 30, 2024, the Corporation declared cash dividends totaling \$151.6 million and \$459.3 million to common stockholders, and cash dividends totaling \$16.2 million and \$37.1 million to preferred stockholders, respectively. During the three and nine months ended September 30, 2023, the Corporation declared cash dividends totaling \$157.6 million and \$474.0 million to common stockholders, and cash dividends totaling \$16.2 million and \$37.1 million to preferred stockholders, respectively.

For the three and nine months ended September 30, 2024, the Corporation repurchased 3,463,546 and 8,112,288 shares of common stock, respectively, at a total cost of \$301.4 million (\$87.01 average price per share) and \$684.2 million (\$84.34 average price per share), respectively, including 15,629 and 398,646 shares withheld, respectively, to satisfy tax withholding obligations related to share-based compensation.

For the three and nine months ended September 30, 2023, the Corporation repurchased 14,738 and 2,426,793 shares of common stock, respectively, at a total cost of \$1.1 million (\$77.39 average price per share) and \$201.3 million (\$82.95 average price per share), respectively, including 14,738 and 356,145 shares withheld, respectively, to satisfy tax withholding obligations related to share-based compensation.

ASSET QUALITY

Securities Portfolio

Northern Trust maintains a high quality debt securities portfolio. The following tables provide the fair value of available for sale (AFS) debt securities and amortized cost of held to maturity (HTM) debt securities by credit rating. Debt securities not explicitly rated were grouped where possible under the credit rating of the issuer of the security.

TABLE 24: FAIR VALUE OF AVAILABLE FOR SALE DEBT SECURITIES BY CREDIT RATING

(\$ In Millions)	SEPTEMBER 30, 2024					
	AAA	AA	A	BBB	NOT RATED	TOTAL
U.S. Government	\$ 6,481.7	\$ —	\$ —	\$ —	\$ —	\$ 6,481.7
Obligations of States and Political Subdivisions	39.4	266.6	—	—	—	306.0
Government Sponsored Agency	13,653.7	—	—	—	—	13,653.7
Non-U.S. Government	327.1	—	—	—	—	327.1
Corporate Debt	8.8	60.9	131.4	—	—	201.1
Covered Bonds	239.7	—	—	—	—	239.7
Sub-Sovereign, Supranational and Non-U.S. Agency Bonds	3,411.9	458.7	117.5	—	—	3,988.1
Other Asset-Backed	2,487.4	—	—	—	—	2,487.4
Commercial Mortgage-Backed	627.1	—	—	—	—	627.1
Total	\$ 27,276.8	\$ 786.2	\$ 248.9	\$ —	\$ —	\$ 28,311.9
Percent of Total	96 %	3 %	1 %	— %	— %	100 %

ASSET QUALITY (continued)
Securities Portfolio (continued)

(\$ In Millions)	DECEMBER 31, 2023					
	AAA	AA	A	BBB	NOT RATED	TOTAL
U.S. Government	\$ 3,622.2	\$ —	\$ —	\$ —	\$ —	\$ 3,622.2
Obligations of States and Political Subdivisions	38.1	257.7	—	—	—	295.8
Government Sponsored Agency	11,553.0	—	—	—	—	11,553.0
Non-U.S. Government	264.4	—	—	—	—	264.4
Corporate Debt	24.7	87.0	157.4	—	10.4	279.5
Covered Bonds	325.3	—	21.8	—	—	347.1
Sub-Sovereign, Supranational and Non-U.S. Agency Bonds	2,353.5	334.0	212.4	—	—	2,899.9
Other Asset-Backed	2,962.6	—	—	—	—	2,962.6
Commercial Mortgage-Backed	865.3	—	—	—	—	865.3
Total	\$ 22,009.1	\$ 678.7	\$ 391.6	\$ —	\$ 10.4	\$ 23,089.8
Percent of Total	95 %	3 %	2 %	— %	— %	100 %

As of December 31, 2023, the less than 1% of AFS debt securities not rated by Moody's Investors Service, Inc. (Moody's), S&P Global Ratings (S&P Global) or Fitch Ratings, Inc. (Fitch Ratings) consisted of corporate debt securities.

TABLE 25: AMORTIZED COST OF HELD TO MATURITY DEBT SECURITIES BY CREDIT RATING

(\$ In Millions)	SEPTEMBER 30, 2024					
	AAA	AA	A	BBB	NOT RATED	TOTAL
Obligations of States and Political Subdivisions	\$ 980.8	\$ 1,569.1	\$ —	\$ —	\$ —	\$ 2,549.9
Government Sponsored Agency	8,826.8	—	—	—	—	8,826.8
Non-U.S. Government	456.4	816.2	752.7	336.0	—	2,361.3
Corporate Debt	—	290.4	200.7	—	—	491.1
Covered Bonds	2,124.8	—	—	—	—	2,124.8
Certificates of Deposit	513.2	—	—	—	29.4	542.6
Sub-Sovereign, Supranational and Non-U.S. Agency Bonds	3,825.8	1,204.5	30.7	1.1	—	5,062.1
Other Asset-Backed	111.6	—	—	—	—	111.6
Commercial Mortgage-Backed	37.6	—	—	—	—	37.6
Other	54.7	—	—	—	546.1	600.8
Total	\$ 16,931.7	\$ 3,880.2	\$ 984.1	\$ 337.1	\$ 575.5	\$ 22,708.6
Percent of Total	75 %	17 %	4 %	1 %	3 %	100 %

(\$ In Millions)	DECEMBER 31, 2023					
	AAA	AA	A	BBB	NOT RATED	TOTAL
Obligations of States and Political Subdivisions	\$ 954.7	\$ 1,609.0	\$ —	\$ —	\$ 0.2	\$ 2,563.9
Government Sponsored Agency	9,355.3	—	—	—	—	9,355.3
Non-U.S. Government	813.3	1,179.6	2,463.3	332.9	—	4,789.1
Corporate Debt	2.1	302.6	341.4	—	—	646.1
Covered Bonds	2,208.6	—	—	—	—	2,208.6
Certificates of Deposit	545.9	—	—	—	39.2	585.1
Sub-Sovereign, Supranational and Non-U.S. Agency Bonds	4,047.9	1,166.5	30.0	1.1	—	5,245.5
Other Asset-Backed	214.2	—	—	—	—	214.2
Commercial Mortgage-Backed	37.6	—	—	—	—	37.6
Other	54.8	—	—	—	521.5	576.3
Total	\$ 18,234.4	\$ 4,257.7	\$ 2,834.7	\$ 334.0	\$ 560.9	\$ 26,221.7
Percent of Total	70 %	16 %	11 %	1 %	2 %	100 %

As of September 30, 2024 and December 31, 2023, the 3% and 2%, respectively, of HTM debt securities not rated by Moody's, S&P Global or Fitch Ratings consisted primarily of investments purchased by Northern Trust to fulfill its obligations under the Community Reinvestment Act (CRA). Northern Trust fulfills its obligations under the CRA by making qualified investments for purposes of supporting institutions and programs that benefit low-to-moderate income communities within Northern Trust's market area.

Net unrealized losses within the investment securities portfolio totaled \$1.5 billion and \$2.3 billion at September 30, 2024 and December 31, 2023, respectively. Net unrealized losses as of September 30, 2024 were comprised of \$54.9 million and \$1.6 billion of gross unrealized gains and losses, respectively. Net unrealized losses as of December 31, 2023 were comprised of

ASSET QUALITY (continued)

Securities Portfolio (continued)

\$20.1 million and \$2.3 billion of gross unrealized gains and losses, respectively. \$245.5 million of the \$1.6 billion gross unrealized losses relate to AFS debt securities as of September 30, 2024, and \$582.4 million of the \$2.3 billion gross unrealized losses relate to AFS debt securities as of December 31, 2023.

As of September 30, 2024, the \$28.3 billion AFS debt securities portfolio had unrealized losses, excluding securities with an allowance for credit losses, of \$114.3 million, \$45.6 million, and \$19.1 million related to government-sponsored agency securities, sub-sovereign, supranational and non-U.S. agency bonds and U.S. government, respectively, which are primarily attributable to higher average market interest rates as compared to the respective purchase dates of the securities. As of December 31, 2023, the \$23.1 billion AFS debt securities portfolio had unrealized losses, excluding securities with an allowance for credit losses, of \$200.3 million, \$105.8 million, and \$100.0 million related to government sponsored agency, supranational and non-U.S. agency bonds, and other asset-backed, respectively, which were primarily attributable to lower yields and tighter spreads.

In January 2024, the Corporation sold certain AFS debt securities that were in an unrealized loss position. The \$189.4 million loss is recognized in Investment Security Gains (Losses), net on the consolidated statements of income for the nine months ended September 30, 2024. In November 2023, the Corporation sold certain AFS debt securities that were in an unrealized loss position. The \$176.4 million loss is recognized in Investment Security Gains (Losses), net on the consolidated statements of income for the period ended December 31, 2023.

As of September 30, 2024, the \$22.7 billion HTM debt securities portfolio had unrealized losses of \$823.8 million, \$197.6 million and \$156.9 million related to government-sponsored agency, sub-sovereign, supranational and non-U.S. agency bonds and Other respectively, which are primarily attributable to higher average market interest rates as compared to the respective purchase dates of the securities. As of December 31, 2023, the \$26.2 billion HTM debt securities portfolio had an unrealized loss of \$1.0 billion and \$294.9 million related to government-sponsored agency and sub-sovereign, supranational and non-U.S. agency bonds, respectively, which are primarily attributable to lower yields and tighter spreads.

HTM debt securities consist of securities that management intends to, and Northern Trust has the ability to, hold until maturity. For additional information relating to the securities portfolio, refer to Note 4—Securities.

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.

For additional information relating to the securities sold under agreements to repurchase, refer to Note 22—Securities Sold Under Agreements to Repurchase.

Nonaccrual Loans and Other Real Estate Owned

Nonaccrual assets consist of nonaccrual loans 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 nonaccrual loans, by loan segment and class, and of OREO that were outstanding at the dates shown, as well as the balance of loans that were delinquent 90 days or more and still accruing interest. Loans that are delinquent 90 days or more and still accruing interest can fluctuate widely based on the timing of cash collections, renegotiation and renewals.

ASSET QUALITY (continued)
Nonaccrual Loans and Other Real Estate Owned (continued)
TABLE 26: NONACCRUAL ASSETS

(\$ In Millions)	SEPTEMBER 30, 2024		DECEMBER 31, 2023	
	AMOUNT	% OF NONACCRUAL LOANS TO TOTAL NONACCRUAL LOANS	AMOUNT	% OF NONACCRUAL LOANS TO TOTAL NONACCRUAL LOANS
Nonaccrual Loans				
Commercial				
Commercial and Institutional	\$ 8.1	21 %	\$ 16.3	26 %
Commercial Real Estate	5.6	14	—	—
Non-U.S.	0.5	1	—	— %
Total Commercial	\$ 14.2	36 %	\$ 16.3	26 %
Personal				
Private Client	\$ 2.0	5 %	\$ 20.3	32 %
Residential Real Estate	23.1	59	27.0	42
Total Personal	\$ 25.1	64 %	\$ 47.3	74 %
Total Nonaccrual Loans	39.3		63.6	
Other Real Estate Owned	—		1.5	
Total Nonaccrual Assets	\$ 39.3		\$ 65.1	
90 Day Past Due Loans Still Accruing	\$ 87.2		\$ 20.1	
Nonaccrual Loans to Total Loans	0.09 %		0.13 %	
Allowance for Credit Losses Assigned to Loans to Nonaccrual Loans	4.7x		2.8x	

Nonaccrual assets of \$39.3 million as of September 30, 2024 decreased \$25.8 million, or 40%, from December 31, 2023, primarily due to a private client loan payoff and a commercial and institutional loan charge-off, both of which occurred in the first quarter. In addition to the negative impact on Net Interest Income and the risk of credit losses, nonaccrual assets also increase operating costs due to the expense associated with collection efforts. Changes in the level of nonaccrual 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 allowance evaluated on an individual basis and the quantitative and qualitative factors used in the determination of the allowance evaluated on a collective basis within the allowance for credit losses.

Northern Trust's credit policies do not allow for the origination of loan types generally considered to be high risk in nature, such as option adjustable rate mortgage loans, 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 a loan-to-collateral value of no more than 65% to 80% at inception. Appraisals of supporting collateral for residential real estate loans are obtained at loan origination and upon refinancing or default or when otherwise considered warranted. Residential real estate collateral appraisals are performed and reviewed by independent third parties.

The commercial real estate portfolio consists of commercial mortgages and construction, acquisition and development loans extended primarily to experienced investors well known to Northern Trust. Underwriting standards generally reflect conservative loan-to-value ratios and debt service coverage requirements. Recourse to owners through guarantees also is commonly required. For additional information relating to the loans portfolio, refer to Note 5—Loans.

Allowance for Credit Losses

The allowance for credit losses—which represents management's best estimate of lifetime expected credit losses related to various portfolios subject to credit risk, off-balance-sheet credit exposure, and specific borrower relationships—is determined by management through a disciplined credit review process. Northern Trust measures expected credit losses of financial assets with similar risk characteristics on a collective basis. A financial asset is measured individually if it does not share similar risk characteristics with other financial assets and the related allowance is determined through an individual evaluation.

Management's estimates utilized in establishing an appropriate level of allowance for credit losses are not dependent on any single assumption. In determining an appropriate allowance level, management evaluates numerous variables, many of which are interrelated or dependent on other assumptions and estimates, and takes into consideration past events, current conditions and reasonable and supportable forecasts. The results of the credit reserve estimation methodology are reviewed quarterly by Northern Trust's Credit Loss Reserve Committee, which receives input from Financial Risk Management, Treasury, Corporate Finance, the Economic Research Department, and each of Northern Trust's reporting business units.

ASSET QUALITY (continued)

Allowance for Credit Losses (continued)

As of September 30, 2024, the Allowance for Credit Losses related to loans, undrawn loan commitments and standby letters of credit, HTM debt securities, and other financial assets, was \$184.8 million, \$26.5 million, \$7.5 million, and \$1.0 million, respectively. As of December 31, 2023, the Allowance for Credit Losses related to loans, undrawn loan commitments and standby letters of credit, HTM debt securities, and other financial assets, was \$178.7 million, \$26.9 million, \$12.7 million, and \$0.9 million, respectively. There was a \$0.2 million and \$1.2 million allowance for credit losses related to AFS debt securities as of September 30, 2024 and December 31, 2023, respectively. For additional information relating to the allowance for credit losses and the changes in the allowance for credit losses during the three and nine months ended September 30, 2024 and September 30, 2023 due to charge-offs, recoveries and provisions for credit losses, refer to Note 6—Allowance for Credit Losses.

The table provides the allowance evaluated on an individual and collective basis for the loan portfolio by segment and class.

TABLE 27: ALLOCATION OF THE ALLOWANCE FOR CREDIT LOSSES FOR LOANS

(\$ In Millions)	SEPTEMBER 30, 2024		DECEMBER 31, 2023	
	ALLOWANCE AMOUNT	PERCENT OF LOANS TO TOTAL LOANS	ALLOWANCE AMOUNT	PERCENT OF LOANS TO TOTAL LOANS
Evaluated on an Individual Basis	\$ 5.5	— %	\$ 13.4	— %
Evaluated on a Collective Basis				
Commercial				
Commercial and Institutional	69.2	25	57.2	24
Commercial Real Estate	103.3	13	101.4	11
Non-U.S.	1.4	7	1.6	6
Other	—	5	0.1	13
Total Commercial	173.9	50	160.3	54
Personal				
Private Client	12.1	33	12.0	30
Residential Real Estate	18.6	15	18.8	13
Non-U.S.	1.2	1	1.1	1
Other	—	1	—	2
Total Personal	31.9	50	31.9	46
Total Allowance Evaluated on a Collective Basis	\$ 205.8		\$ 192.2	
Total Allowance for Credit Losses	\$ 211.3		\$ 205.6	
Allowance Assigned to				
Loans	\$ 184.8		\$ 178.7	
Undrawn Commitments and Standby Letters of Credit	26.5		26.9	
Total Allowance for Credit Losses	\$ 211.3		\$ 205.6	
Allowance Assigned to Loans to Total Loans	0.44 %		0.38 %	

Commercial Real Estate Loans

The table below provides additional detail regarding commercial real estate loan types.

TABLE 28: COMMERCIAL REAL ESTATE LOANS

(In Millions)	SEPTEMBER 30, 2024	DECEMBER 31, 2023
Commercial Mortgages		
Apartment/ Multi-family	\$ 1,580.4	\$ 1,633.9
Office	862.8	1,035.1
Industrial/ Warehouse	924.3	687.1
Retail	678.9	620.9
Other	658.0	575.3
Total Commercial Mortgages	4,704.4	4,552.3
Construction, Acquisition and Development Loans	546.6	581.9
Total Commercial Real Estate Loans	\$ 5,251.0	\$ 5,134.2

For an overall discussion on the loan portfolio and on the allowance, refer to Note 5—Loans and Note 6—Allowance for Credit Losses.

STATEMENTS OF CASH FLOWS

The following discusses the statement of cash flow activities for the nine months ended September 30, 2024 and 2023.

TABLE 29: CASH FLOW ACTIVITY SUMMARY

(In Millions)	NINE MONTHS ENDED SEPTEMBER 30,	
	2024	2023
Net cash provided by (used in):		
Operating activities	\$ 2,148.8	\$ (177.6)
Investing activities	(355.9)	9,647.1
Financing activities	287.7	(8,890.7)
Effect of Foreign Currency Exchange Rates on Cash	(0.4)	(277.3)
Change in Cash and Due from Banks	\$ 2,080.2	\$ 301.5

Operating Activities

Net cash provided by operating activities of \$2.1 billion for the nine months ended September 30, 2024, was primarily attributable to period earnings and net changes in other operating activities, partially offset by increases in receivables and pension plan contributions.

Net cash used in operating activities of \$177.6 million for the nine months ended September 30, 2023, was primarily attributable to higher net collateral deposited with derivative counterparties and an increase in receivables, partially offset by period earnings, net changes in other operating activities, and an increase in interest payable.

Investing Activities

Net cash used in investing activities of \$355.9 million for the nine months ended September 30, 2024, was primarily attributable to increased levels of Federal Reserve and other central bank deposits and net purchases of AFS debt securities, partially offset by the net proceeds received from the sale of certain Visa shares and net proceeds associated with loans and HTM debt securities.

Net cash provided by investing activities of \$9.6 billion for the nine months ended September 30, 2023, was primarily attributable to decreased levels of Federal Reserve and other central bank deposits.

Financing Activities

Net cash provided by financing activities of \$287.7 million for the nine months ended September 30, 2024, was primarily attributable to the increased levels of total deposits, partially offset by increased treasury share purchases and securities sold under agreements to repurchase.

Net cash used in financing activities of \$8.9 billion for the nine months ended September 30, 2023, was primarily attributable to the decreased levels of total deposits, partially offset by increased levels of federal funds purchased and proceeds from long-term debt. The decrease in total deposits was primarily attributable to lower levels of savings, money market, and other interest-bearing deposits and lower levels of non-U.S. office interest-bearing deposits.

CAPITAL RATIOS

The capital ratios of Northern Trust Corporation and its principal subsidiary, The Northern Trust Company, remained strong at September 30, 2024, exceeding the requirements for classification as “well-capitalized” under applicable U.S. regulatory requirements.

Northern Trust is a Category II institution as defined by the Federal Reserve Board which requires us to adhere to regulatory capital standards. In adhering to these standards, Northern Trust engages in a range of reporting and activities with regulators to affirm our financial strength and stability, including but not limited to, capital adequacy reporting that deducts any unrealized losses related to AFS securities from reported capital, and stringent, annual company-run and supervisory stress testing in the form of Comprehensive Capital Analysis and Review (CCAR) exercises, which confirms our ability to remain solvent under severely adverse market conditions.

The results of the 2024 Dodd-Frank Act Stress Test (DFAST), published by the Federal Reserve Board on June 26, 2024, resulted in Northern Trust’s stress capital buffer and effective Common Equity Tier 1 capital ratio minimum requirement remaining constant at 2.5% and 7.0%, respectively, for the annual capital plan cycle beginning on October 1, 2024 through September 30, 2025.

On July 27, 2023, the U.S. banking regulators issued the Basel III Endgame Proposal, which would change how risk-based capital requirements are determined for banking organizations including Northern Trust. The proposal would eliminate the existing advanced approach methodologies for determining risk-weighted assets (RWA) and replace it with a new expanded risk-based approach. The new requirements would be phased in over a three-year period beginning July 1, 2025. Based on our current understanding of the proposed rule, we estimate that, if the expanded risk-based approach had applied on a fully phased-in basis, and in the absence of taking any actions to mitigate its impact, our expanded risk-based approach RWAs would have been approximately 5% to 15% higher than our actual standardized approach RWAs.

The table below provides capital ratios, as well as the required minimum capital ratios, for Northern Trust Corporation and The Northern Trust Company.

TABLE 30: REGULATORY CAPITAL RATIOS

Capital Ratios — Northern Trust Corporation	SEPTEMBER 30, 2024		JUNE 30, 2024		SEPTEMBER 30, 2023		WELL- CAPITALIZED RATIOS	MINIMUM CAPITAL RATIOS
	STANDARDIZED APPROACH	ADVANCED APPROACH	STANDARDIZED APPROACH	ADVANCED APPROACH	STANDARDIZED APPROACH	ADVANCED APPROACH		
Common Equity Tier 1 Capital	12.6 %	14.0 %	12.6 %	13.9 %	11.4 %	13.2 %	N/A	4.5 %
Tier 1 Capital	13.6	15.1	13.6	15.0	12.4	14.3	6.0	6.0
Total Capital	15.6	17.0	15.5	16.9	14.5	16.5	10.0	8.0
Tier 1 Leverage	8.1	8.1	8.0	8.0	7.9	7.9	N/A	4.0
Supplementary Leverage	N/A	9.2	N/A	9.1	N/A	8.4	N/A	3.0
Capital Ratios — The Northern Trust Company	SEPTEMBER 30, 2024		JUNE 30, 2024		SEPTEMBER 30, 2023		WELL- CAPITALIZED RATIOS	MINIMUM CAPITAL RATIOS
	STANDARDIZED APPROACH	ADVANCED APPROACH	STANDARDIZED APPROACH	ADVANCED APPROACH	STANDARDIZED APPROACH	ADVANCED APPROACH		
Common Equity Tier 1 Capital	12.3 %	13.9 %	12.9 %	14.6 %	12.3 %	14.5 %	6.5 %	4.5 %
Tier 1 Capital	12.3	13.9	12.9	14.6	12.3	14.5	8.0	6.0
Total Capital	14.0	15.5	14.6	16.1	14.2	16.4	10.0	8.0
Tier 1 Leverage	7.3	7.3	7.6	7.6	7.8	7.8	5.0	4.0
Supplementary Leverage	N/A	8.2	N/A	8.6	N/A	8.3	3.0	3.0

RECENT ACCOUNTING PRONOUNCEMENTS AND DEVELOPMENTS

In November 2023, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2023-07, “Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures” (ASU 2023-07). ASU 2023-07 significantly expands disclosures about a public entity’s reportable segments, primarily through more frequent and enhanced disclosures about significant segment expenses. ASU 2023-07 does not change how a public entity identifies its operating segments, aggregates those operating segments or applies the quantitative thresholds to determine its reportable segments. ASU 2023-07 is effective for annual periods beginning after December 15, 2023, and interim periods within annual periods beginning after December 15, 2024. Early adoption is permitted. Upon adoption, the impact of ASU 2023-07 will be limited to certain enhancements within the notes to the consolidated financial statements and therefore is not expected to have an impact on Northern Trust’s consolidated balance sheets or consolidated statements of income.

In December 2023, the FASB issued ASU No. 2023-09, “Income Taxes (Topic 740): Improvements to Income Tax Disclosures” (ASU 2023-09). ASU 2023-09 enhances disclosures by further disaggregating existing annual income tax disclosures related to the effective tax rate reconciliation and income taxes paid. ASU 2023-09 is effective for annual periods beginning after December 15, 2024, although early adoption is permitted. Upon adoption, the impact of ASU 2023-09 will be limited to certain enhancements within the notes to the consolidated financial statements and therefore is not expected to have an impact on Northern Trust’s consolidated balance sheets or consolidated statements of income.

RISK MANAGEMENT

Liquidity Risk

Liquidity risk is the risk of not being able to raise sufficient funds or maintain collateral to meet balance sheet and contingent liability cash flow obligations when due, because of firm-specific or market-wide stress events. Northern Trust is a Category II institution as defined by the Federal Reserve Board which requires us to adhere to the same regulatory liquidity standards as U.S. global systemically important bank holding companies (GSIBs). In adhering to these standards, Northern Trust engages in a range of reporting and activities with regulators to affirm our financial strength and stability, including but not limited to, daily Liquidity Coverage Ratio and Net Stable Funding Ratio calculations to regulators.

We maintain a highly liquid balance sheet consisting principally of cash held at the Federal Reserve and other central banks, money market assets, and short-term investment securities, which were 64% and 59% of total assets as of September 30, 2024 and December 31, 2023, respectively. 87% and 82% of Northern Trust’s securities portfolio is composed of U.S. Treasury, government sponsored agency and triple-A rated securities as of September 30, 2024 and December 31, 2023, respectively.

Market Risk

There are two types of market risk, interest rate risk associated with the banking book and trading risk. Interest rate risk associated with the banking book is the potential for movements in interest rates to cause changes in Net Interest Income and the market value of equity, including Accumulated Other Comprehensive Income (Loss) from the AFS debt securities portfolio. Trading risk is the potential for movements in market variables such as foreign exchange and interest rates to cause changes in the value of trading positions.

Northern Trust uses two primary measurement techniques to manage interest rate risk: Net Interest Income (NII) sensitivity and Market Value of Equity (MVE) sensitivity. NII sensitivity provides management with a short-term view of the impact of interest rate changes on NII. MVE sensitivity provides management with a long-term view of interest rate changes on MVE based on the period-end balance sheet. Higher interest rates may impact the fair value of AFS debt securities which in turn affects Accumulated Other Comprehensive Income (Loss), which can impact regulatory capital ratios.

As part of its risk management activities, Northern Trust also measures daily the risk of loss associated with all trading book positions using a Value-at-Risk (VaR) model and applying the historical simulation methodology. The following information about Northern Trust’s management of market risk should be read in conjunction with our Annual Report on Form 10-K for the year ended December 31, 2023.

NII Sensitivity — The modeling of NII sensitivity 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) of a static balance sheet to changes in interest rates. Stress testing of interest rates is performed to include such scenarios as immediate parallel shocks to rates, nonparallel (i.e., twist) changes to yield curves that result in their becoming steeper or flatter, and changes to the relationship among the yield curves (i.e., basis risk).

The NII sensitivity analysis incorporates certain critical assumptions such as interest rates and client behaviors under changing rate environments. These assumptions are based on a combination of historical analysis and future expected pricing behavior. The simulation cannot precisely estimate NII sensitivity given uncertainty in the assumptions. The following key assumptions are incorporated into the simulation:

RISK MANAGEMENT (continued)**Market Risk (continued)**

- the balance sheet size and mix remains constant over the simulation horizon with maturing assets and liabilities replaced with instruments with similar terms as those that are maturing, with the exception of certain nonmaturity deposits that are considered short-term in nature and therefore receive a more conservative interest-bearing treatment;
- prepayments on mortgage loans and securities collateralized by mortgages are projected under each rate scenario using a third-party mortgage analytics system that incorporates market prepayment assumptions;
- cash flows for structured securities are estimated using a third-party vendor in conjunction with the prepayments provided by the third-party mortgage analytics vendor;
- nonmaturity deposit pricing is projected based on Northern Trust's actual historical patterns and management judgment, depending upon the availability of historical data and current pricing strategies/or judgment; and
- new business rates are based on current spreads to market indices.

The following table shows the estimated NII impact over the next twelve months of 100 and 200 basis point ramps upward and downward in interest rates relative to forward rates as of September 30, 2024 and September 30, 2023. Each rate movement is assumed to occur gradually over a one-year period.

TABLE 31: NET INTEREST INCOME SENSITIVITY

INCREASE (DECREASE) ESTIMATED IMPACT ON NEXT TWELVE MONTHS OF NET INTEREST INCOME		
(In Millions)		
		SEPTEMBER 30, 2024
		SEPTEMBER 30, 2023
Increase in Interest Rates Above Market Implied Forward Rates		
100 Basis Points	\$	59 \$
200 Basis Points		115
Decrease in Interest Rates Below Market Implied Forward Rates		
100 Basis Points	\$	(71) \$
200 Basis Points		(151) \$

The NII sensitivity analysis does not incorporate certain management actions that may be used to mitigate adverse effects of actual interest rate movement. For that reason and others, the estimated impacts do not reflect the likely actual results but serve as estimates of interest rate risk. NII sensitivity is not comparable to actual results disclosed elsewhere or directly predictive of future values of other measures provided.

MVE Sensitivity — MVE is defined as the present value of assets minus the present value of liabilities, net of the value of financial derivatives that are used to manage the interest rate risk of balance sheet items. The MVE looks at the whole balance sheet, which includes AFS debt securities, HTM debt securities, money market accounts, deposits, loans and wholesale borrowings. The potential effect of interest rate changes on MVE 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 MVE sensitivity under various rate scenarios. Stress testing of interest rates is performed to include such scenarios as immediate parallel shocks to rates, nonparallel (i.e., twist) changes to yield curves that result in their becoming steeper or flatter, and changes to the relationship among the yield curves (i.e., basis risk).

The MVE sensitivity analysis incorporates certain critical assumptions such as interest rates and client behaviors under changing rate environments. These assumptions are based on a combination of historical analysis and future expected pricing behavior. The simulation cannot precisely estimate MVE sensitivity given uncertainty in the assumptions. Many of the assumptions that apply to NII sensitivity also apply to MVE sensitivity simulations, with the following separate key assumptions incorporated into the MVE simulation:

- the present value of nonmaturity deposits is estimated using dynamic decay methodologies or estimated remaining lives, which are based on a combination of Northern Trust's actual historical runoff patterns and management judgment—some balances are assumed to be core and have longer lives while other balances are assumed to be temporary and have comparatively shorter lives;
- the present values of most noninterest-bearing balances (such as receivables, equipment, and payables) are the same as their book values; and
- Monte Carlo simulation is used to generate forward interest rate paths.

RISK MANAGEMENT (continued)

Market Risk (continued)

The following table shows the estimated impact on MVE of 100 and 200 basis point shocks up and down from current market implied forward rates at September 30, 2024 and December 31, 2023. Each rate movement is assumed to occur gradually over a one-year period.

TABLE 32: MARKET VALUE OF EQUITY SENSITIVITY

INCREASE (DECREASE) ESTIMATED IMPACT ON MARKET VALUE OF EQUITY			
(In Millions)		SEPTEMBER 30, 2024	DECEMBER 31, 2023
Increase in Interest Rates Above Market Implied Forward Rates			
100 Basis Points	\$	(382)	\$ (360)
200 Basis Points		(812)	(817)
Decrease in Interest Rates Below Market Implied Forward Rates			
100 Basis Points	\$	514	\$ 430
200 Basis Points		924	725

The MVE simulations do not incorporate certain management actions that may be used to mitigate adverse effects of actual interest rate movements. For that reason and others, the estimated impacts do not reflect the likely actual results but serve as estimates of interest rate risk. MVE sensitivity is not comparable to actual results disclosed elsewhere or directly predictive of future values of other measures provided.

Value-At-Risk (VaR) — Northern Trust measures daily the risk of loss associated with trading positions using a VaR model and applying the historical simulation methodology. This statistical model provides estimates, based on high confidence levels, of the potential loss in value that might be incurred if an adverse shift in foreign exchange rates and interest 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 and interest rates. VaR is computed for each trading desk and for the global portfolio.

Northern Trust monitors several variations of the VaR measures to meet specific regulatory and internal management needs. Variations include different methodologies (historical simulation, Monte Carlo simulation and Taylor approximation), horizons of one day and ten days, confidence levels of 95% and 99%, subcomponent VaRs using only foreign exchange (FX) drivers, only interest rate (IR) drivers, and only volatility drivers, and look-back periods of one year, two years, and four years. Those alternative measures provide management an array of corroborating metrics and alternative perspectives on Northern Trust's market risks.

The following table presents the levels of total regulatory VaR and its subcomponents, covering global foreign exchange (GFX), foreign currency balances, and interest rate derivatives combined, in the periods indicated below, based on the historical simulation methodology, a 99% confidence level, a one-day horizon and equally weighted volatility. The total VaR is typically less than the sum of its three subcomponents due to diversification benefits derived from interactions among the three drivers.

TABLE 33: VALUE-AT-RISK

(In Millions)	Combined Trading Book VaR			FX VaR (FX DRIVERS ONLY)			IR VaR (IR DRIVERS ONLY)			VOL VaR (VOLATILITY DRIVERS ONLY)			
	THREE MONTHS ENDED	SEPTEMBER 30, 2024	JUNE 30, 2024	SEPTEMBER 30, 2023	SEPTEMBER 30, 2024	JUNE 30, 2024	SEPTEMBER 30, 2023	SEPTEMBER 30, 2024	JUNE 30, 2024	SEPTEMBER 30, 2023	SEPTEMBER 30, 2024	JUNE 30, 2024	SEPTEMBER 30, 2023
High	\$	0.8	\$ 1.6	\$ 2.2	\$ 1.0	\$ 2.0	\$ 1.9	\$ 0.2	\$ 0.3	\$ 0.9	\$ —	\$ —	\$ —
Low		0.2	0.2	0.3	0.1	0.1	0.2	0.1	0.1	0.1	—	—	—
Average		0.4	0.6	0.8	0.3	0.5	0.7	0.1	0.1	0.3	—	—	—
Quarter-End		0.3	0.8	0.4	0.2	0.8	0.3	0.1	0.1	0.1	—	—	—

During the three months ended September 30, 2024, Northern Trust did not incur an actual GFX trading loss in excess of the daily GFX VaR estimate.

Foreign currency balances arise not from executing trades but rather in the course of regular business operations, namely from non-U.S.-dollar-denominated revenues and expenses accruing onto the Corporation's balance sheet. No longer hedged as of the third quarter of 2023, the balances are considered trading positions for regulatory purposes.

RECONCILIATION TO FULLY TAXABLE EQUIVALENT

The following table presents a reconciliation of Interest Income, Net Interest Income, net interest margin, and total revenue prepared in accordance with GAAP to such measures on an FTE basis, which are non-GAAP financial measures. Net interest margin is calculated by dividing annualized Net Interest Income by average interest-earning assets. 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 34: RECONCILIATION TO FULLY TAXABLE EQUIVALENT

(\$ In Millions)	THREE MONTHS ENDED SEPTEMBER 30,		NINE MONTHS ENDED SEPTEMBER 30,	
	2024	2023	2024	2023
Net Interest Income				
Interest Income - GAAP	\$ 2,530.2	\$ 1,935.0	\$ 7,482.3	\$ 5,125.4
Add: FTE Adjustment	7.1	13.2	21.3	39.5
Interest Income (FTE) - Non-GAAP	\$ 2,537.3	\$ 1,948.2	\$ 7,503.6	\$ 5,164.9
Net Interest Income - GAAP	\$ 562.3	\$ 456.2	\$ 1,613.3	\$ 1,498.9
Add: FTE Adjustment	7.1	13.2	21.3	39.5
Net Interest Income (FTE) - Non-GAAP	\$ 569.4	\$ 469.4	\$ 1,634.6	\$ 1,538.4
Net Interest Margin - GAAP	1.66 %	1.41 %	1.60 %	1.51 %
Net Interest Margin (FTE) - Non-GAAP	1.68 %	1.45 %	1.62 %	1.55 %
Total Revenue				
Total Revenue - GAAP	\$ 1,968.5	\$ 1,726.5	\$ 6,330.8	\$ 5,228.2
Add: FTE Adjustment	7.1	13.2	21.3	39.5
Total Revenue (FTE) - Non-GAAP	\$ 1,975.6	\$ 1,739.7	\$ 6,352.1	\$ 5,267.7

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 and share repurchase program; accounting estimates and assumptions; credit quality including allowance levels; future pension plan contributions; effective tax rate; anticipated expense levels; contingent liabilities; acquisitions; strategies; market and industry trends; and expectations regarding the impact of accounting pronouncements and legislation. 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 in the U.S. or other countries across the globe resulting from any of a number of factors;
- 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;
- changes in interest rates or in the monetary or other policies of various regulatory authorities or central banks;
- Northern Trust’s success in controlling the costs and expenses of its business operations and the impacts of any broader inflationary environment thereon;
- a decline in the value of securities held in Northern Trust’s investment portfolio, 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 those related to cybersecurity, data privacy and security, human errors or omissions, pricing or valuation of securities, fraud, operational resilience (including systems performance), failure to maintain sustainable business practices, and breakdowns in processes or internal controls;
- Northern Trust’s success in responding to and investing in changes and advancements in technology;
- geopolitical risks, risks related to global climate change and the risks of extraordinary events such as pandemics, natural disasters, terrorist events and war (including the continuing military conflicts involving Ukraine and the Russian Federation and evolving events in the Middle East), and the responses of the U.S. and other countries to those events;
- unexpected deposit outflows;
- the effectiveness of Northern Trust’s management of its human capital, including its success in recruiting and retaining necessary and diverse personnel to support business growth and expansion and maintain sufficient expertise to support increasingly complex products and services;
- changes in the legal, regulatory and enforcement framework and oversight applicable to financial institutions, including Northern Trust;
- 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 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;
- 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 U.S. and other countries, such as anti-money laundering, anti-bribery, and data privacy and security;
- failure to satisfy regulatory standards or to obtain regulatory approvals when required, including for the use and distribution of capital;
- Northern Trust’s success in continuing to enhance its 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 possibility that losses may be in excess of Northern Trust’s recorded liability and estimated range of possible loss for litigation exposures;
- the risk of damage to Northern Trust’s reputation which may undermine the confidence of clients, counterparties, rating agencies, and stockholders;
- the downgrade of U.S. government-issued and other securities;

FORWARD-LOOKING STATEMENTS (continued)

- changes in tax laws, accounting requirements or interpretations and other legislation in the U.S. or other countries that could affect Northern Trust or its clients;
- the pace and extent of continued globalization of investment activity and growth in worldwide financial assets;
- 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 generate investment results that satisfy clients and to develop an array of investment products;
- uncertainties inherent in Northern Trust's assumptions concerning its pension plan, including discount rates and expected contributions, returns and payouts;
- risks associated with being a holding company, including Northern Trust's dependence on dividends from its principal subsidiary; and
- other factors identified elsewhere in the Corporation's Annual Report on Form 10-K for the year ended December 31, 2023, 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 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 (UNAUDITED)

NORTHERN TRUST CORPORATION

(In Millions Except Share Information)

SEPTEMBER 30, 2024 DECEMBER 31, 2023

ASSETS

Cash and Due from Banks	\$ 6,871.7	\$ 4,791.5
Federal Reserve and Other Central Bank Deposits	40,848.8	34,326.2
Interest-Bearing Deposits with Banks	1,606.8	1,939.0
Securities Purchased under Agreements to Resell	981.6	784.7
Debt Securities		
Available for Sale (Amortized cost of \$28,513.1 and \$23,659.0)	28,311.9	23,089.8
Held to Maturity (Fair value of \$21,372.0 and \$24,473.0)	22,708.6	26,221.7
Total Debt Securities	51,020.5	49,311.5
Loans		
Commercial	20,833.8	25,412.8
Personal	21,116.5	22,204.2
Total Loans (Net of unearned income of \$6.2 and \$5.9)	41,950.3	47,617.0
Allowance for Credit Losses	(193.3)	(192.3)
Buildings and Equipment	480.3	502.2
Client Security Settlement Receivables	354.2	212.6
Goodwill	707.8	702.3
Other Assets	11,125.1	10,788.4
Total Assets	\$ 155,753.8	\$ 150,783.1

LIABILITIES

Deposits		
Demand and Other Noninterest-Bearing	\$ 13,610.6	\$ 14,246.4
Savings, Money Market and Other Interest-Bearing	23,069.0	25,252.1
Savings Certificates and Other Time	6,255.2	4,109.7
Non U.S. Offices — Noninterest-Bearing	8,564.2	8,584.7
— Interest-Bearing	69,684.3	63,971.1
Total Deposits	121,183.3	116,164.0
Federal Funds Purchased	2,761.9	3,045.4
Securities Sold Under Agreements to Repurchase	170.8	784.7
Other Borrowings	6,903.2	6,567.8
Senior Notes	2,820.9	2,773.2
Long-Term Debt	4,077.2	4,065.0
Other Liabilities	5,087.5	5,485.1
Total Liabilities	143,004.8	138,885.2

STOCKHOLDERS' EQUITY

Preferred Stock, No Par Value; Authorized 10,000,000 shares:		
Series D, authorized and outstanding shares of 5,000	493.5	493.5
Series E, authorized and outstanding shares of 16,000	391.4	391.4
Common Stock, \$1.66 2/3 Par Value; Authorized 560,000,000 shares;		
Outstanding shares of 198,218,483 and 205,126,224	408.6	408.6
Additional Paid-In Capital	1,008.1	1,009.6
Retained Earnings	15,313.1	14,233.8
Accumulated Other Comprehensive Loss	(779.5)	(1,137.9)
Treasury Stock (46,953,041 and 40,045,300 shares, at cost)	(4,086.2)	(3,501.1)
Total Stockholders' Equity	12,749.0	11,897.9
Total Liabilities and Stockholders' Equity	\$ 155,753.8	\$ 150,783.1

See accompanying notes to the consolidated financial statements.

**CONSOLIDATED STATEMENTS OF INCOME
(UNAUDITED)**
NORTHERN TRUST CORPORATION

(In Millions Except Share Information)	THREE MONTHS ENDED SEPTEMBER 30,		NINE MONTHS ENDED SEPTEMBER 30,	
	2024	2023	2024	2023
Noninterest Income				
Trust, Investment and Other Servicing Fees	\$ 1,196.6	\$ 1,111.9	\$ 3,505.6	\$ 3,271.8
Foreign Exchange Trading Income	54.1	51.8	169.5	154.9
Treasury Management Fees	8.2	7.5	26.5	23.8
Security Commissions and Trading Income	35.5	30.9	107.7	101.7
Other Operating Income	111.8	68.2	1,097.5	170.2
Investment Security Gains (Losses), net	—	—	(189.3)	6.9
Total Noninterest Income	1,406.2	1,270.3	4,717.5	3,729.3
Net Interest Income				
Interest Income	2,530.2	1,935.0	7,482.3	5,125.4
Interest Expense	1,967.9	1,478.8	5,869.0	3,626.5
Net Interest Income	562.3	456.2	1,613.3	1,498.9
Provision for Credit Losses	8.0	14.0	7.5	13.5
Net Interest Income after Provision for Credit Losses	554.3	442.2	1,605.8	1,485.4
Noninterest Expense				
Compensation	583.6	558.1	1,875.9	1,757.8
Employee Benefits	109.2	100.8	310.5	303.2
Outside Services	256.3	229.6	746.5	671.3
Equipment and Software	270.4	232.5	800.6	693.5
Occupancy	53.8	58.7	162.7	173.8
Other Operating Expense	86.1	98.5	361.8	296.1
Total Noninterest Expense	1,359.4	1,278.2	4,258.0	3,895.7
Income before Income Taxes	601.1	434.3	2,065.3	1,319.0
Provision for Income Taxes	136.2	106.5	489.6	324.8
Net Income	\$ 464.9	\$ 327.8	\$ 1,575.7	\$ 994.2
Preferred Stock Dividends	16.2	16.2	37.1	37.1
Net Income Applicable to Common Stock	\$ 448.7	\$ 311.6	\$ 1,538.6	\$ 957.1
Per Common Share				
Net Income – Basic	\$ 2.23	\$ 1.49	\$ 7.53	\$ 4.56
– Diluted	2.22	1.49	7.51	4.56
Average Number of Common Shares Outstanding				
– Basic	199,937,543	207,021,554	202,614,386	207,611,420
– Diluted	200,549,063	207,252,992	203,131,400	207,927,720

**CONSOLIDATED STATEMENTS OF
COMPREHENSIVE INCOME (UNAUDITED)**
NORTHERN TRUST CORPORATION

(In Millions)	THREE MONTHS ENDED SEPTEMBER 30,		NINE MONTHS ENDED SEPTEMBER 30,	
	2024	2023	2024	2023
Net Income	\$ 464.9	\$ 327.8	\$ 1,575.7	\$ 994.2
Other Comprehensive Income (Loss) (Net of Tax and Reclassifications)				
Net Unrealized Gains (Losses) on Available for Sale Debt Securities	63.9	32.3	320.7	170.5
Net Unrealized Gains (Losses) on Cash Flow Hedges	0.3	(0.4)	(0.5)	(1.1)
Net Foreign Currency Adjustments	18.9	9.6	30.5	34.2
Net Pension and Other Postretirement Benefit Adjustments	2.4	1.0	7.7	2.2
Other Comprehensive Income (Loss)	85.5	42.5	358.4	205.8
Comprehensive Income (Loss)	\$ 550.4	\$ 370.3	\$ 1,934.1	\$ 1,200.0

See accompanying notes to the consolidated financial statements.

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

NORTHERN TRUST CORPORATION

NINE MONTHS ENDED SEPTEMBER 30, 2024

(In Millions Except Per Share Information)	PREFERRED STOCK	COMMON STOCK	ADDITIONAL PAID-IN CAPITAL	RETAINED EARNINGS	ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)	TREASURY STOCK	TOTAL
Balance at December 31, 2023	\$ 884.9	\$ 408.6	\$ 1,009.6	\$ 14,233.8	\$ (1,137.9)	\$ (3,501.1)	\$ 11,897.9
Net Income	—	—	—	214.7	—	—	214.7
Other Comprehensive Income (Loss) (Net of Tax and Reclassifications)	—	—	—	—	220.3	—	220.3
Dividends Declared:							
Common Stock, \$0.75 per share	—	—	—	(153.4)	—	—	(153.4)
Preferred Stock	—	—	—	(16.2)	—	—	(16.2)
Stock Awards and Options Exercised	—	—	(26.1)	—	—	97.1	71.0
Stock Purchased	—	—	—	—	—	(132.0)	(132.0)
Excise Tax on Share Repurchases	—	—	—	—	—	(0.5)	(0.5)
Balance at March 31, 2024	\$ 884.9	\$ 408.6	\$ 983.5	\$ 14,278.9	\$ (917.6)	\$ (3,536.5)	\$ 12,101.8
Net Income	—	—	—	896.1	—	—	896.1
Other Comprehensive Income (Loss) (Net of Tax and Reclassifications)	—	—	—	—	52.6	—	52.6
Dividends Declared:							
Common Stock, \$0.75 per share	—	—	—	(154.3)	—	—	(154.3)
Preferred Stock	—	—	—	(4.7)	—	—	(4.7)
Stock Awards and Options Exercised	—	—	13.4	—	—	4.1	17.5
Stock Purchased	—	—	—	—	—	(250.8)	(250.8)
Excise Tax on Share Repurchases	—	—	—	—	—	(2.4)	(2.4)
Balance at June 30, 2024	\$ 884.9	\$ 408.6	\$ 996.9	\$ 15,016.0	\$ (865.0)	\$ (3,785.6)	\$ 12,655.8
Net Income	—	—	—	464.9	—	—	464.9
Other Comprehensive Income (Loss) (Net of Tax and Reclassifications)	—	—	—	—	85.5	—	85.5
Dividends Declared:							
Common Stock, \$0.75 per share	—	—	—	(151.6)	—	—	(151.6)
Preferred Stock	—	—	—	(16.2)	—	—	(16.2)
Stock Awards and Options Exercised	—	—	11.2	—	—	3.8	15.0
Stock Purchased	—	—	—	—	—	(301.4)	(301.4)
Excise Tax on Share Repurchases	—	—	—	—	—	(3.0)	(3.0)
Balance at September 30, 2024	\$ 884.9	\$ 408.6	\$ 1,008.1	\$ 15,313.1	\$ (779.5)	\$ (4,086.2)	\$ 12,749.0

See accompanying notes to the consolidated financial statements.

NINE MONTHS ENDED SEPTEMBER 30, 2023

(In Millions Except Per Share Information)	PREFERRED STOCK	COMMON STOCK	ADDITIONAL PAID-IN CAPITAL	RETAINED EARNINGS	ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)	TREASURY STOCK	TOTAL
Balance at December 31, 2022	\$ 884.9	\$ 408.6	\$ 983.5	\$ 13,798.5	\$ (1,569.2)	\$ (3,246.8)	\$ 11,259.5
Net Income	—	—	—	334.6	—	—	334.6
Other Comprehensive Income (Loss) (Net of Tax and Reclassifications)	—	—	—	—	203.0	—	203.0
Dividends Declared:							
Common Stock, \$0.75 per share	—	—	—	(158.6)	—	—	(158.6)
Preferred Stock	—	—	—	(16.2)	—	—	(16.2)
Stock Awards and Options Exercised	—	—	(19.0)	—	—	85.4	66.4
Stock Purchased	—	—	—	—	—	(100.9)	(100.9)
Balance at March 31, 2023	\$ 884.9	\$ 408.6	\$ 964.5	\$ 13,958.3	\$ (1,366.2)	\$ (3,262.3)	\$ 11,587.8
Net Income	—	—	—	331.8	—	—	331.8
Other Comprehensive Income (Loss) (Net of Tax and Reclassifications)	—	—	—	—	(39.7)	—	(39.7)
Dividends Declared:							
Common Stock, \$0.75 per share	—	—	—	(157.8)	—	—	(157.8)
Preferred Stock	—	—	—	(4.7)	—	—	(4.7)
Stock Awards and Options Exercised	—	—	15.5	—	—	2.1	17.6
Stock Purchased	—	—	—	—	—	(99.3)	(99.3)
Balance at June 30, 2023	\$ 884.9	\$ 408.6	\$ 980.0	\$ 14,127.6	\$ (1,405.9)	\$ (3,359.5)	\$ 11,635.7
Net Income	—	—	—	327.8	—	—	327.8
Other Comprehensive Income (Loss) (Net of Tax and Reclassifications)	—	—	—	—	42.5	—	42.5
Dividends Declared:							
Common Stock, \$0.75 per share	—	—	—	(157.6)	—	—	(157.6)
Preferred Stock	—	—	—	(16.2)	—	—	(16.2)
Stock Awards and Options Exercised	—	—	13.1	—	—	4.1	17.2
Stock Purchased	—	—	—	—	—	(1.1)	(1.1)
Excise Tax on Share Repurchases	—	—	—	—	—	(1.1)	(1.1)
Balance at September 30, 2023	\$ 884.9	\$ 408.6	\$ 993.1	\$ 14,281.6	\$ (1,363.4)	\$ (3,357.6)	\$ 11,847.2

See accompanying notes to the consolidated financial statements.

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

NORTHERN TRUST CORPORATION

NINE MONTHS ENDED SEPTEMBER 30,

(In Millions)

2024

2023

CASH FLOWS FROM OPERATING ACTIVITIES

Net Income	\$	1,575.7	\$	994.2
Adjustments to Reconcile Net Income to Net Cash Used in Operating Activities				
Investment Security Losses/(Gains)		189.3		(6.9)
Amortization and Accretion of Securities and Unearned Income, net		(24.6)		5.8
Provision for Credit Losses		7.5		13.5
Depreciation and Amortization		533.9		465.6
Pension Plan Contributions		(208.0)		(16.5)
Change in Receivables		(278.6)		(200.3)
Change in Interest Payable		4.1		88.8
Change in Collateral With Derivative Counterparties, net		(7.4)		(1,857.5)
Other Operating Activities, net		356.9		335.7
Net Cash Provided by / (Used in) Operating Activities		2,148.8		(177.6)

CASH FLOWS FROM INVESTING ACTIVITIES

Change in Federal Funds Sold		—		(32.0)
Change in Securities Purchased under Agreements to Resell		(179.6)		717.5
Change in Interest-Bearing Deposits with Banks		294.8		(203.0)
Net Change in Federal Reserve and Other Central Bank Deposits		(6,116.4)		7,760.3
Purchases of Held to Maturity Debt Securities		(19,233.9)		(25,821.1)
Proceeds from the Maturity and Redemption of Held to Maturity Debt Securities		23,008.3		25,872.9
Purchases of Available for Sale Debt Securities		(10,075.5)		(4,412.0)
Proceeds from the Maturity and Sales of Available for Sale Debt Securities		5,218.9		6,912.5
Change in Loans		5,669.1		(681.6)
Purchases of Buildings and Equipment		(60.8)		(52.7)
Purchases and Development of Computer Software		(458.2)		(412.8)
Change in Client Security Settlement Receivables		(132.2)		1,555.0
Proceeds from the sale of Visa Shares		794.9		—
Other Investing Activities, net		914.7		(1,555.9)
Net Cash (Used in) Investing Activities		(355.9)		9,647.1

CASH FLOWS FROM FINANCING ACTIVITIES

Change in Deposits		2,112.4		(13,089.4)
Change in Federal Funds Purchased		(283.5)		3,642.4
Change in Securities Sold under Agreements to Repurchase		(613.9)		(21.3)
Change in Short-Term Other Borrowings		250.1		(717.4)
Proceeds from Long Term Debt		—		2,000.0
Treasury Stock Purchased		(684.2)		(201.3)
Net Proceeds from Stock Options		4.3		1.9
Cash Dividends Paid on Common Stock		(454.7)		(467.3)
Cash Dividends Paid on Preferred Stock		(37.1)		(37.1)
Other Financing Activities, net		(5.7)		(1.2)
Net Cash Provided by Financing Activities		287.7		(8,890.7)

Effect of Foreign Currency Exchange Rates on Cash (0.4) (277.3)

Change in Cash and Due from Banks 2,080.2 301.5

Cash and Due from Banks at Beginning of Period 4,791.5 4,654.2

Cash and Due from Banks at End of Period \$ 6,871.7 \$ 4,955.7

SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION

Interest Paid	\$	5,852.4	\$	3,536.9
Income Taxes Paid		185.3		211.1
Transfers from Loans to OREO		—		0.2
Reclassification of certain cash collateral received from Other Operating Activities to Deposits ⁽¹⁾		1,157.2		—

⁽¹⁾ Beginning January 1, 2024, Northern Trust reclassified certain cash collateral received from Other Liabilities to Deposits on the consolidated statement of financial condition. Prior periods have not been restated.

See accompanying notes to the consolidated financial statements.

Note 1 – Basis of Presentation

The consolidated financial statements include the accounts of Northern Trust Corporation (Corporation) and its wholly-owned subsidiary, The Northern Trust Company (Bank), and various other wholly-owned subsidiaries of the Corporation and Bank. Throughout the notes to the consolidated financial statements, the term “Northern Trust” refers to the Corporation and its subsidiaries. Intercompany balances and transactions have been eliminated in consolidation. The consolidated financial statements, as of and for the periods ended September 30, 2024 and 2023, 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 for the banking industry. For a description of Northern Trust’s significant accounting policies, refer to Note 1—Summary of Significant Accounting Policies included under Item 8. Financial Statements and Supplementary Data in the Annual Report on Form 10-K for the year ended December 31, 2023.

Note 2 – Recent Accounting Pronouncements

On January 1, 2024, Northern Trust adopted Accounting Standards Update (ASU) No. 2023-02, “Investments—Equity Method and Joint Ventures (Topic 323): Accounting for Investments in Tax Credit Structures Using the Proportional Amortization Method—a consensus of the Emerging Issues Task Force” (ASU 2023-02). The amendments in ASU 2023-02 allow entities to elect the proportional amortization method to account for tax equity investments if certain conditions are met regardless of the tax credit program from which the income tax credits are received. Under the proportional amortization method, an entity amortizes the initial cost of the investment in proportion to the income tax credits and other income tax benefits received and recognizes the net amortization and income tax credits and other income tax benefits in the income statement as a component of income tax expense (benefit). In addition, ASU 2023-02 requires specific disclosures that must be applied to all investments that generate income tax credits and other income tax benefits for which the entity has elected to apply the proportional amortization method in accordance with Subtopic 323-740. Upon adoption of ASU 2023-02, there was no significant impact to Northern Trust’s consolidated balance sheets or consolidated statements of income. Please refer to Note 19—Variable Interest Entities for further information.

On January 1, 2024, Northern Trust adopted ASU No. 2022-03, “Fair Value Measurement (Topic 820): Fair Value Measurement of Equity Securities Subject to Contractual Sale Restrictions” (ASU 2022-03). The amendments in ASU 2022-03 clarify that a contractual restriction on the sale of an equity security is not considered part of the unit of account of the equity security and, therefore, is not considered in measuring fair value. ASU 2022-03 also clarifies that an entity cannot, as a separate unit of account, recognize and measure a contractual sale restriction. Additionally, ASU 2022-03 introduces new disclosure requirements to provide investors with information about contractual sale restrictions including the nature and remaining duration of these restrictions. Upon adoption of ASU 2022-03, there was no impact to Northern Trust’s consolidated balance sheets or consolidated statements of income.

Note 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. No transfers into or out of Level 3 occurred during the nine months ended September 30, 2024 or the year ended December 31, 2023.

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

Northern Trust’s Level 1 assets are comprised primarily of available for sale (AFS) 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.

Northern Trust’s Level 2 assets include AFS debt 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 predetermined 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, 2024, Northern Trust’s AFS debt securities

Notes to Consolidated Financial Statements (unaudited) (continued)

portfolio included 943 Level 2 debt securities with an aggregate market value of \$21.8 billion. Substantially all were valued by external pricing vendors. As of December 31, 2023, Northern Trust's AFS debt securities portfolio included 929 Level 2 debt securities with an aggregate market value of \$19.5 billion. All 929 debt securities were valued by 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.

Visa Class C common shares are also categorized as Level 2 assets and are valued using quoted active market prices for similar securities (Visa Class A common stock). See "Visa Class B Common Shares and Makewhole Agreement" under Note 20—Commitments and Contingent Liabilities for further information.

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

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 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 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 and Makewhole Agreement" under Note 20—Commitments and 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.

The following table presents the fair values of Northern Trust's Level 3 liabilities as of September 30, 2024 and December 31, 2023, as well as the valuation techniques, significant unobservable inputs, and quantitative information used to develop significant unobservable inputs for such liabilities as of such dates.

TABLE 35: LEVEL 3 SIGNIFICANT UNOBSERVABLE INPUTS

SEPTEMBER 30, 2024					
FINANCIAL INSTRUMENT	FAIR VALUE	VALUATION TECHNIQUE	UNOBSERVABLE INPUTS	INPUT VALUES	WEIGHTED-AVERAGE INPUT VALUES ⁽¹⁾
Swaps Related to Sale of Certain Visa Class B Common Shares	\$27.8 million	Discounted Cash Flow	Conversion Rate	1.54x	1.54x
			Visa Class A Appreciation	9.06%	9.06%
			Expected Duration	13 - 35.5 months	26.5 months

⁽¹⁾ Weighted average of expected duration based on scenario probability.

DECEMBER 31, 2023					
FINANCIAL INSTRUMENT	FAIR VALUE	VALUATION TECHNIQUE	UNOBSERVABLE INPUTS	INPUT VALUES	WEIGHTED-AVERAGE INPUT VALUES ⁽¹⁾
Swaps Related to Sale of Certain Visa Class B Common Shares	\$25.4 million	Discounted Cash Flow	Conversion Rate	1.59x	1.59x
			Visa Class A Appreciation	10.49%	10.49%
			Expected Duration	9 - 27 months	13 months

⁽¹⁾ Weighted average of expected duration based on scenario probability.

Notes to Consolidated Financial Statements (unaudited) (continued)

The following table presents assets and liabilities measured at fair value on a recurring basis as of September 30, 2024 and December 31, 2023, segregated by fair value hierarchy level.

TABLE 36: RECURRING BASIS HIERARCHY LEVELING

(In Millions)	SEPTEMBER 30, 2024					ASSETS/ LIABILITIES AT FAIR VALUE
	LEVEL 1	LEVEL 2	LEVEL 3	NETTING		
Debt Securities						
Available for Sale						
U.S. Government	\$ 6,481.7	\$ —	\$ —	\$ —	\$ —	6,481.7
Obligations of States and Political Subdivisions	—	306.0	—	—	—	306.0
Government Sponsored Agency	—	13,653.7	—	—	—	13,653.7
Non-U.S. Government	—	327.1	—	—	—	327.1
Corporate Debt	—	201.1	—	—	—	201.1
Covered Bonds	—	239.7	—	—	—	239.7
Sub-Sovereign, Supranational and Non-U.S. Agency Bonds	—	3,988.1	—	—	—	3,988.1
Other Asset-Backed	—	2,487.4	—	—	—	2,487.4
Commercial Mortgage-Backed	—	627.1	—	—	—	627.1
Total Available for Sale Debt Securities	6,481.7	21,830.2	—	—	—	28,311.9
Other Assets						
Equity Securities ⁽¹⁾	85.0	27.8	—	—	—	112.8
Derivative Assets						
Foreign Exchange Contracts	—	3,052.9	—	(2,664.5)	—	388.4
Interest Rate Contracts	—	466.1	—	(108.6)	—	357.5
Total Derivative Assets	—	3,519.0	—	(2,773.1)	—	745.9
Other Liabilities						
Derivative Liabilities						
Foreign Exchange Contracts	—	3,083.9	—	(1,784.0)	—	1,299.9
Interest Rate Contracts	—	504.1	—	(9.1)	—	495.0
Other Financial Derivatives ⁽²⁾	—	—	27.8	(26.8)	—	1.0
Total Derivative Liabilities	\$ —	\$ 3,588.0	\$ 27.8	\$ (1,819.9)	\$ —	1,795.9

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, 2024, derivative assets and liabilities shown above also include reductions of \$2.0 billion and \$1.0 billion, respectively, as a result of cash collateral received from and deposited with derivative counterparties.

⁽¹⁾ Equity securities consists of a money market investment and Visa Class C common shares with a fair value of \$85.0 million and \$27.8 million, respectively, as of September 30, 2024.

⁽²⁾ Consists of swaps related to the sale of certain Visa Class B common shares.

Notes to Consolidated Financial Statements (unaudited) (continued)

DECEMBER 31, 2023

(In Millions)	LEVEL 1	LEVEL 2	LEVEL 3	NETTING	ASSETS/ LIABILITIES AT FAIR VALUE
Debt Securities					
Available for Sale					
U.S. Government	\$ 3,622.2	\$ —	\$ —	\$ —	\$ 3,622.2
Obligations of States and Political Subdivisions	—	295.8	—	—	295.8
Government Sponsored Agency	—	11,553.0	—	—	11,553.0
Non-U.S. Government	—	264.4	—	—	264.4
Corporate Debt	—	279.5	—	—	279.5
Covered Bonds	—	347.1	—	—	347.1
Sub-Sovereign, Supranational and Non-U.S. Agency Bonds	—	2,899.9	—	—	2,899.9
Other Asset-Backed	—	2,962.6	—	—	2,962.6
Commercial Mortgage-Backed	—	865.3	—	—	865.3
Total Available for Sale Debt Securities	3,622.2	19,467.6	—	—	23,089.8
Other Assets					
Money Market Investment	95.0	—	—	—	95.0
Derivative Assets					
Foreign Exchange Contracts	—	3,266.7	—	(2,937.2)	329.5
Interest Rate Contracts	—	301.5	—	(189.5)	112.0
Total Derivative Assets	—	3,568.2	—	(3,126.7)	441.5
Other Liabilities					
Derivative Liabilities					
Foreign Exchange Contracts	—	3,255.2	—	(2,175.7)	1,079.5
Interest Rate Contracts	—	369.2	—	(6.0)	363.2
Other Financial Derivatives ⁽¹⁾	—	—	25.4	(23.7)	1.7
Total Derivative Liabilities	\$ —	\$ 3,624.4	\$ 25.4	\$ (2,205.4)	\$ 1,444.4

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, 2023, derivative assets and liabilities shown above also include reductions of \$2.1 billion and \$1.2 billion, respectively, as a result of cash collateral received from and deposited with derivative counterparties.

⁽¹⁾ Consists of swaps related to the sale of certain Visa Class B common shares.

The following table presents the changes in Level 3 liabilities for the three and nine months ended September 30, 2024 and 2023.

TABLE 37: CHANGES IN LEVEL 3 LIABILITIES

(In Millions)	SWAPS RELATED TO SALE OF CERTAIN VISA CLASS B COMMON SHARES	
	2024	2023
THREE MONTHS ENDED SEPTEMBER 30,		
Fair Value at July 1	\$ 30.6	\$ 36.4
Total (Gains) Losses:		
Included in Earnings ⁽¹⁾	13.8	(2.4)
Purchases, Issues, Sales, and Settlements		
Settlements	(16.6)	(5.1)
Fair Value at September 30	\$ 27.8	\$ 28.9
NINE MONTHS ENDED SEPTEMBER 30,		
Fair Value at January 1	\$ 25.4	\$ 34.8
Total (Gains) Losses:		
Included in Earnings ⁽¹⁾	30.4	16.1
Purchases, Issues, Sales, and Settlements		
Settlements	(28.0)	(22.0)
Fair Value at September 30	\$ 27.8	\$ 28.9

⁽¹⁾ (Gains) losses are recorded in Other Operating Income on the consolidated statements of income.

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 separately disclose these subsequent fair value measurements and to classify them under the fair value hierarchy.

Notes to Consolidated Financial Statements (unaudited) (continued)

Assets measured at fair value on a nonrecurring basis at September 30, 2024 and December 31, 2023, all of which were categorized as Level 3 under the fair value hierarchy, were comprised of nonaccrual loans whose values were based on real estate and other available collateral. Assets measured at fair value on a nonrecurring basis at December 31, 2023 also includes other real estate owned (OREO) properties, categorized as Level 3 under the fair value hierarchy.

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. The fair values of real estate loan collateral were subject to adjustments to reflect management's judgment as to realizable value and consisted of discount factors of 20.0% with a weighted average based on fair values of 20.0%, and a range of discount factors from 0% to 20.0% with a weighted average of 2.0%, as of September 30, 2024 and December 31, 2023, respectively. 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-dependent nonaccrual loans that have been adjusted to fair value totaled \$25.8 million and \$43.3 million at September 30, 2024 and December 31, 2023, respectively.

The following table presents the fair values of Northern Trust's Level 3 assets that were measured at fair value on a nonrecurring basis as of September 30, 2024 and December 31, 2023, as well as the valuation technique, significant unobservable inputs and quantitative information used to develop the significant unobservable inputs for such assets as of such dates.

TABLE 38: LEVEL 3 NONRECURRING BASIS SIGNIFICANT UNOBSERVABLE INPUTS

SEPTEMBER 30, 2024					
FINANCIAL INSTRUMENT	FAIR VALUE ⁽¹⁾	VALUATION TECHNIQUE	UNOBSERVABLE INPUTS	INPUT VALUES	WEIGHTED-AVERAGE INPUT VALUES
Loans	\$25.8 million	Market Approach	Discount factor applied to real estate collateral-dependent loans to reflect realizable value	20.0%	20.0%

DECEMBER 31, 2023					
FINANCIAL INSTRUMENT	FAIR VALUE ⁽¹⁾	VALUATION TECHNIQUE	UNOBSERVABLE INPUTS	INPUT VALUES	WEIGHTED-AVERAGE INPUT VALUES
Loans	\$43.3 million	Market Approach	Discount factor applied to real estate collateral-dependent loans to reflect realizable value	0.0 % - 20.0%	2.0%

⁽¹⁾ Includes real estate collateral-dependent loans and other collateral-dependent loans.

⁽¹⁾ Includes real estate collateral-dependent loans and other collateral-dependent loans.

Notes to Consolidated Financial Statements (unaudited) (continued)

The following tables present the book value and estimated fair value, including the fair value hierarchy level, of Northern Trust's financial instruments that are not measured at fair value on the consolidated balance sheets as of September 30, 2024 and December 31, 2023. The following tables exclude those items measured at fair value on a recurring basis.

TABLE 39: FAIR VALUE OF FINANCIAL INSTRUMENTS

(In Millions)	SEPTEMBER 30, 2024					
	BOOK VALUE	TOTAL ESTIMATED FAIR VALUE	ESTIMATED FAIR VALUE			
			LEVEL 1	LEVEL 2	LEVEL 3	
FINANCIAL ASSETS						
Cash and Due from Banks	\$ 6,871.7	\$ 6,871.7	\$ 6,871.7	\$ —	\$ —	—
Federal Reserve and Other Central Bank Deposits	40,848.8	40,848.8	—	40,848.8	—	—
Interest-Bearing Deposits with Banks	1,606.8	1,606.8	—	1,606.8	—	—
Securities Purchased under Agreements to Resell	981.6	981.6	—	981.6	—	—
Debt Securities - Held to Maturity	22,708.6	21,372.0	—	21,372.0	—	—
Loans						
Held for Investment	41,765.5	41,488.7	—	—	—	41,488.7
Other Assets	1,450.5	1,446.0	87.9	1,358.1	—	—
FINANCIAL LIABILITIES						
Deposits	121,183.3	123,302.5	—	123,302.5	—	—
Federal Funds Purchased	2,761.9	2,761.9	—	2,761.9	—	—
Securities Sold Under Agreements to Repurchase	170.8	170.8	—	170.8	—	—
Other Borrowings	6,903.2	6,940.0	—	6,940.0	—	—
Senior Notes	2,820.9	2,869.1	—	2,869.1	—	—
Long-Term Debt	4,077.2	4,248.1	—	4,248.1	—	—
Unfunded Commitments	173.4	173.4	—	173.4	—	—
Other Liabilities	47.9	47.9	—	—	—	47.9
	DECEMBER 31, 2023					
(In Millions)	BOOK VALUE	TOTAL ESTIMATED FAIR VALUE	ESTIMATED FAIR VALUE			
			LEVEL 1	LEVEL 2	LEVEL 3	
FINANCIAL ASSETS						
Cash and Due from Banks	\$ 4,791.5	\$ 4,791.5	\$ 4,791.5	\$ —	\$ —	—
Federal Reserve and Other Central Bank Deposits	34,326.2	34,326.2	—	34,326.2	—	—
Interest-Bearing Deposits with Banks	1,939.0	1,939.0	—	1,939.0	—	—
Securities Purchased under Agreements to Resell	784.7	784.7	—	784.7	—	—
Debt Securities - Held to Maturity	26,221.7	24,473.0	—	24,473.0	—	—
Loans						
Held for Investment	47,438.3	47,598.3	—	—	—	47,598.3
Other Assets	1,476.6	1,458.0	86.1	1,371.9	—	—
FINANCIAL LIABILITIES						
Deposits	116,164.0	116,207.6	—	116,207.6	—	—
Federal Funds Purchased	3,045.4	3,045.4	—	3,045.4	—	—
Securities Sold Under Agreements to Repurchase	784.7	784.7	—	784.7	—	—
Other Borrowings	6,567.8	6,607.4	—	6,607.4	—	—
Senior Notes	2,773.2	2,798.1	—	2,798.1	—	—
Long-Term Debt	4,065.0	4,186.8	—	4,186.8	—	—
Unfunded Commitments	178.8	178.8	—	178.8	—	—
Other Liabilities	74.9	74.9	—	—	—	74.9

Notes to Consolidated Financial Statements (unaudited) (continued)
Note 4 – Securities

Available for Sale Debt Securities. The following tables provide the amortized cost and fair values as of September 30, 2024 and December 31, 2023, and remaining maturities of AFS debt securities as of September 30, 2024.

TABLE 40: RECONCILIATION OF AMORTIZED COST TO FAIR VALUE OF AVAILABLE FOR SALE DEBT SECURITIES

SEPTEMBER 30, 2024					
(In Millions)	AMORTIZED COST	GROSS UNREALIZED GAINS	GROSS UNREALIZED LOSSES	FAIR VALUE	
U.S. Government	\$ 6,497.4	\$ 3.4	\$ 19.1	\$ 6,481.7	
Obligations of States and Political Subdivisions	321.6	—	15.6	306.0	
Government Sponsored Agency	13,749.0	19.0	114.3	13,653.7	
Non-U.S. Government	341.5	—	14.4	327.1	
Corporate Debt	205.0	0.1	4.0	201.1	
Covered Bonds	242.2	0.6	3.1	239.7	
Sub-Sovereign, Supranational and Non-U.S. Agency Bonds	4,019.7	14.0	45.6	3,988.1	
Other Asset-Backed	2,494.5	7.1	14.2	2,487.4	
Commercial Mortgage-Backed	642.2	0.1	15.2	627.1	
Total	\$ 28,513.1	\$ 44.3	\$ 245.5	\$ 28,311.9	

DECEMBER 31, 2023					
(In Millions)	AMORTIZED COST	GROSS UNREALIZED GAINS	GROSS UNREALIZED LOSSES	FAIR VALUE	
U.S. Government	\$ 3,681.5	\$ 2.2	\$ 61.5	\$ 3,622.2	
Obligations of States and Political Subdivisions	315.8	—	20.0	295.8	
Government Sponsored Agency	11,744.3	9.0	200.3	11,553.0	
Non-U.S. Government	284.8	—	20.4	264.4	
Corporate Debt	287.5	0.1	8.1	279.5	
Covered Bonds	356.8	—	9.7	347.1	
Sub-Sovereign, Supranational and Non-U.S. Agency Bonds	3,013.8	0.1	114.0	2,899.9	
Other Asset-Backed	3,061.0	1.6	100.0	2,962.6	
Commercial Mortgage-Backed	913.5	0.2	48.4	865.3	
Total	\$ 23,659.0	\$ 13.2	\$ 582.4	\$ 23,089.8	

TABLE 41: REMAINING MATURITY OF AVAILABLE FOR SALE DEBT SECURITIES

SEPTEMBER 30, 2024 (In Millions)	ONE YEAR OR LESS		ONE TO FIVE YEARS		FIVE TO TEN YEARS		OVER TEN YEARS		TOTAL	
	AMORTIZED COST	FAIR VALUE	AMORTIZED COST	FAIR VALUE	AMORTIZED COST	FAIR VALUE	AMORTIZED COST	FAIR VALUE	AMORTIZED COST	FAIR VALUE
U.S. Government	\$ 496.2	\$ 493.9	\$ 3,862.0	\$ 3,852.1	\$ 2,139.2	\$ 2,135.7	\$ —	\$ —	\$ 6,497.4	\$ 6,481.7
Obligations of States and Political Subdivisions	—	—	206.3	198.0	115.3	108.0	—	—	321.6	306.0
Government Sponsored Agency	3,223.6	3,209.3	7,181.0	7,141.1	2,472.3	2,449.7	872.1	853.6	13,749.0	13,653.7
Non-U.S. Government	69.2	68.8	272.3	258.3	—	—	—	—	341.5	327.1
Corporate Debt	114.6	114.1	90.4	87.0	—	—	—	—	205.0	201.1
Covered Bonds	—	—	242.2	239.7	—	—	—	—	242.2	239.7
Sub-Sovereign, Supranational and Non-U.S. Agency Bonds	192.8	190.9	3,520.1	3,501.1	306.8	296.1	—	—	4,019.7	3,988.1
Other Asset-Backed	154.6	152.6	1,726.6	1,719.6	496.6	498.2	116.7	117.0	2,494.5	2,487.4
Commercial Mortgage-Backed	23.1	22.8	585.0	576.2	34.1	28.1	—	—	642.2	627.1
Total	\$ 4,274.1	\$ 4,252.4	\$ 17,685.9	\$ 17,573.1	\$ 5,564.3	\$ 5,515.8	\$ 988.8	\$ 970.6	\$ 28,513.1	\$ 28,311.9

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

Notes to Consolidated Financial Statements (unaudited) (continued)

Available for Sale Debt Securities with Unrealized Losses. The following table provides information regarding AFS debt securities with no credit losses reported that had been in a continuous unrealized loss position for less than twelve months and for twelve months or longer as of September 30, 2024 and December 31, 2023.

TABLE 42: AVAILABLE FOR SALE DEBT SECURITIES IN UNREALIZED LOSS POSITION WITH NO CREDIT LOSSES REPORTED

SEPTEMBER 30, 2024 (In Millions)	LESS THAN 12 MONTHS		12 MONTHS OR LONGER		TOTAL	
	FAIR VALUE	UNREALIZED LOSSES	FAIR VALUE	UNREALIZED LOSSES	FAIR VALUE	UNREALIZED LOSSES
U.S. Government	\$ 5,293.0	\$ 6.9	\$ 630.9	\$ 12.2	\$ 5,923.9	\$ 19.1
Obligations of States and Political Subdivisions	—	—	305.9	15.6	305.9	15.6
Government Sponsored Agency	2,028.2	3.6	6,676.9	110.7	8,705.1	114.3
Non-U.S. Government	55.3	—	271.9	14.4	327.2	14.4
Corporate Debt	—	—	104.5	2.4	104.5	2.4
Covered Bonds	—	—	126.7	3.1	126.7	3.1
Sub-Sovereign, Supranational and Non-U.S. Agency Bonds	645.3	0.7	917.6	44.9	1,562.9	45.6
Other Asset-Backed	—	—	476.3	14.2	476.3	14.2
Commercial Mortgage-Backed	12.5	—	587.8	15.2	600.3	15.2
Total	\$ 8,034.3	\$ 11.2	\$ 10,098.5	\$ 232.7	\$ 18,132.8	\$ 243.9

Note: One corporate debt AFS security with a fair value of \$43.1 million and unrealized losses of \$1.6 million has been excluded from the table above as this AFS security had a \$0.2 million allowance for credit losses reported as of September 30, 2024. Refer to the discussion further below and Note 6—Allowance for Credit Losses for further information.

DECEMBER 31, 2023 (In Millions)	LESS THAN 12 MONTHS		12 MONTHS OR LONGER		TOTAL	
	FAIR VALUE	UNREALIZED LOSSES	FAIR VALUE	UNREALIZED LOSSES	FAIR VALUE	UNREALIZED LOSSES
U.S. Government	\$ —	\$ —	\$ 3,364.7	\$ 61.5	\$ 3,364.7	\$ 61.5
Obligations of States and Political Subdivisions	87.8	5.9	208.0	14.1	295.8	20.0
Government Sponsored Agency	331.0	11.5	9,486.6	188.8	9,817.6	200.3
Non-U.S. Government	—	—	264.5	20.4	264.5	20.4
Corporate Debt	4.4	0.1	143.0	2.1	147.4	2.2
Covered Bonds	—	—	213.2	9.7	213.2	9.7
Sub-Sovereign, Supranational and Non-U.S. Agency Bonds	—	—	2,477.0	105.8	2,477.0	105.8
Other Asset-Backed	19.8	2.0	1,998.7	98.0	2,018.5	100.0
Commercial Mortgage-Backed	60.0	4.6	776.6	43.8	836.6	48.4
Total	\$ 503.0	\$ 24.1	\$ 18,932.3	\$ 544.2	\$ 19,435.3	\$ 568.3

Note: Three corporate debt AFS securities with a fair value of \$98.4 million and unrealized losses of \$5.9 million and one sub-sovereign, supranational and non-U.S. agency bonds AFS security with a fair value of \$71.0 million and unrealized loss of \$8.2 million have been excluded from the table above as these AFS securities have a \$1.2 million allowance for credit losses reported as of December 31, 2023. Refer to the discussion further below and Note 6—Allowance for Credit Losses for further information.

As of September 30, 2024, 693 AFS debt securities with a combined fair value of \$18.1 billion were in an unrealized loss position without an allowance for credit losses, with their unrealized losses totaling \$243.9 million. As of September 30, 2024, unrealized losses related to AFS debt securities of \$114.3 million, \$45.6 million, and \$19.1 million related to government-sponsored agency securities, sub-sovereign, supranational and non-U.S. agency bonds and U.S. Government, respectively, which are primarily attributable to higher average market interest rates as compared to the respective purchase dates of the securities.

As of December 31, 2023, 898 AFS debt securities with a combined fair value of \$19.4 billion were in an unrealized loss position without an allowance for credit losses, with their unrealized losses totaling \$568.3 million. As of December 31, 2023, unrealized losses related to AFS debt securities of \$200.3 million, \$105.8 million, and \$100.0 million related to government-sponsored agency, sub-sovereign, supranational and non-U.S. agency bonds, and other asset-backed, respectively, which are primarily attributable to lower yields and tighter spreads.

Notes to Consolidated Financial Statements (unaudited) (continued)

AFS debt securities impairment reviews are conducted quarterly to identify and evaluate securities that have indications of possible credit losses. A determination as to whether a security's decline in market value is related to credit impairment 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 credit-related include, but are not limited to, the severity of the impairment; the cause of the impairment; 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 Northern Trust 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 a credit loss has occurred. In January 2024, the Corporation sold certain AFS debt securities that were in an unrealized loss position. The \$189.4 million loss is recognized in Investment Security Gains (Losses), net on the consolidated statements of income for the nine months ended September 30, 2024. In November 2023, the Corporation sold certain AFS debt securities that were in an unrealized loss position. The \$176.4 million loss is recognized in Investment Security Gains (Losses), net on the consolidated statements of income for the period ended December 31, 2023.

There was a negative provision for credit losses of \$0.4 million and a negative provision for credit losses of \$1.0 million for AFS securities for the three and nine months ended September 30, 2024, respectively. There was a negative provision for credit losses of \$0.6 million for AFS securities for both the three and nine months ended September 30, 2023. There was a \$0.2 million allowance for credit losses for AFS securities as of September 30, 2024, which was related to corporate debt securities and \$1.2 million allowance for credit losses for AFS securities as of December 31, 2023, which was related to corporate debt securities and non-U.S. agency bonds. The process for identifying credit losses for AFS securities is based on the best estimate of cash flows to be collected from the security, discounted using the security's effective interest rate. If the present value of the expected cash flows is found to be less than the current amortized cost of the security, an allowance for credit losses is generally recorded equal to the difference between the two amounts, limited to the amount the amortized cost basis exceeds the fair value of the security. For additional information, please refer to Note 6— Allowance for Credit Losses.

Held to Maturity Debt Securities. Held to maturity (HTM) debt securities consist of securities that management intends to, and Northern Trust has the ability to, hold until maturity. The following tables provide the amortized cost and fair values as of September 30, 2024 and December 31, 2023, and remaining maturities of HTM debt securities as of September 30, 2024.

TABLE 43: RECONCILIATION OF AMORTIZED COST TO FAIR VALUE OF HELD TO MATURITY DEBT SECURITIES

(In Millions)	SEPTEMBER 30, 2024				
	AMORTIZED COST	GROSS UNREALIZED GAINS	GROSS UNREALIZED LOSSES	FAIR VALUE	
Obligations of States and Political Subdivisions	\$ 2,549.9	\$ 4.4	\$ 14.8	\$ 2,539.5	
Government Sponsored Agency	8,826.8	2.6	823.8	8,005.6	
Non-U.S. Government	2,361.3	0.2	65.2	2,296.3	
Corporate Debt	491.1	—	14.7	476.4	
Covered Bonds	2,124.8	0.3	72.7	2,052.4	
Certificates of Deposit	542.6	—	0.3	542.3	
Sub-Sovereign, Supranational and Non-U.S. Agency Bonds	5,062.1	2.6	197.6	4,867.1	
Other Asset-Backed	111.6	0.5	0.2	111.9	
Commercial Mortgage-Backed	37.6	—	1.0	36.6	
Other	600.8	—	156.9	443.9	
Total	\$ 22,708.6	\$ 10.6	\$ 1,347.2	\$ 21,372.0	
	DECEMBER 31, 2023				
(In Millions)	AMORTIZED COST	GROSS UNREALIZED GAINS	GROSS UNREALIZED LOSSES	FAIR VALUE	
Obligations of States and Political Subdivisions	2,563.9	0.5	72.4	2,492.0	
Government Sponsored Agency	9,355.3	2.3	1,012.4	8,345.2	
Non-U.S. Government	4,789.1	0.2	90.7	4,698.6	
Corporate Debt	646.1	—	28.2	617.9	
Covered Bonds	2,208.6	0.3	108.3	2,100.6	
Certificates of Deposit	585.1	—	0.7	584.4	
Sub-Sovereign, Supranational and Non-U.S. Agency Bonds	5,245.5	3.2	294.9	4,953.8	
Other Asset-Backed	214.2	0.4	0.2	214.4	
Commercial Mortgage-Backed	37.6	—	0.8	36.8	
Other	576.3	—	147.0	429.3	
Total	\$ 26,221.7	\$ 6.9	\$ 1,755.6	\$ 24,473.0	

Notes to Consolidated Financial Statements (unaudited) (continued)

As of September 30, 2024, the \$22.7 billion HTM debt securities portfolio had unrealized losses of \$823.8 million, \$197.6 million and \$156.9 million related to government-sponsored agency, sub-sovereign, supranational and non-U.S. agency bonds and other, respectively, which are primarily attributable to higher average market interest rates as compared to the respective purchase dates of the securities. As of December 31, 2023, the \$26.2 billion HTM debt securities portfolio had unrealized losses of \$1.0 billion and \$294.9 million related to government-sponsored agency and sub-sovereign, supranational and non-U.S. agency bonds, respectively, which are primarily attributable to lower yields and tighter spreads.

TABLE 44: REMAINING MATURITY OF HELD TO MATURITY DEBT SECURITIES

SEPTEMBER 30, 2024 (In Millions)	ONE YEAR OR LESS		ONE TO FIVE YEARS		FIVE TO TEN YEARS		OVER TEN YEARS		TOTAL	
	Amortized Cost	Fair Value	Amortized Cost	Fair Value	Amortized Cost	Fair Value	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Obligations of States and Political Subdivisions	\$ 106.8	\$ 106.3	\$ 1,302.2	\$ 1,298.7	\$ 935.6	\$ 931.9	\$ 205.3	\$ 202.6	\$ 2,549.9	\$ 2,539.5
Government Sponsored Agency	917.4	843.7	3,345.6	3,056.6	2,874.6	2,617.6	1,689.2	1,487.7	8,826.8	8,005.6
Non-U.S. Government	1,254.9	1,252.6	1,072.4	1,013.1	34.0	30.6	—	—	2,361.3	2,296.3
Corporate Debt	249.3	245.5	226.1	217.2	15.7	13.7	—	—	491.1	476.4
Covered Bonds	660.6	656.9	1,254.4	1,200.5	209.8	195.0	—	—	2,124.8	2,052.4
Certificates of Deposit	542.6	542.3	—	—	—	—	—	—	542.6	542.3
Sub-Sovereign, Supranational and Non-U.S. Agency Bonds	1,723.9	1,705.6	3,332.5	3,156.7	5.7	4.8	—	—	5,062.1	4,867.1
Other Asset-Backed	4.7	4.5	69.2	69.7	37.7	37.7	—	—	111.6	111.9
Commercial Mortgage-Backed	—	—	37.6	36.6	—	—	—	—	37.6	36.6
Other	71.0	69.3	293.3	267.6	50.7	42.5	185.8	64.5	600.8	443.9
Total	\$ 5,531.2	\$ 5,426.7	\$ 10,933.3	\$ 10,316.7	\$ 4,163.8	\$ 3,873.8	\$ 2,080.3	\$ 1,754.8	\$ 22,708.6	\$ 21,372.0

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

Credit Quality Indicators. The following table provides the amortized cost of HTM debt securities by credit rating.

TABLE 45: AMORTIZED COST OF HELD TO MATURITY DEBT SECURITIES BY CREDIT RATING

(\$ In Millions)	SEPTEMBER 30, 2024					TOTAL
	AAA	AA	A	BBB	NOT RATED	
Obligations of States and Political Subdivisions	\$ 980.8	\$ 1,569.1	\$ —	\$ —	\$ —	\$ 2,549.9
Government Sponsored Agency	8,826.8	—	—	—	—	8,826.8
Non-U.S. Government	456.4	816.2	752.7	336.0	—	2,361.3
Corporate Debt	—	290.4	200.7	—	—	491.1
Covered Bonds	2,124.8	—	—	—	—	2,124.8
Certificates of Deposit	513.2	—	—	—	29.4	542.6
Sub-Sovereign, Supranational and Non-U.S. Agency Bonds	3,825.8	1,204.5	30.7	1.1	—	5,062.1
Other Asset-Backed	111.6	—	—	—	—	111.6
Commercial Mortgage-Backed	37.6	—	—	—	—	37.6
Other	54.7	—	—	—	546.1	600.8
Total	\$ 16,931.7	\$ 3,880.2	\$ 984.1	\$ 337.1	\$ 575.5	\$ 22,708.6
Percent of Total	75 %	17 %	4 %	1 %	3 %	100 %

Notes to Consolidated Financial Statements (unaudited) (continued)

(\$ In Millions)	DECEMBER 31, 2023					
	AAA	AA	A	BBB	NOT RATED	TOTAL
Obligations of States and Political Subdivisions	\$ 954.7	\$ 1,609.0	\$ —	\$ —	\$ 0.2	\$ 2,563.9
Government Sponsored Agency	9,355.3	—	—	—	—	9,355.3
Non-U.S. Government	813.3	1,179.6	2,463.3	332.9	—	4,789.1
Corporate Debt	2.1	302.6	341.4	—	—	646.1
Covered Bonds	2,208.6	—	—	—	—	2,208.6
Certificates of Deposit	545.9	—	—	—	39.2	585.1
Sub-Sovereign, Supranational and Non-U.S. Agency Bonds	4,047.9	1,166.5	30.0	1.1	—	5,245.5
Other Asset-Backed	214.2	—	—	—	—	214.2
Commercial Mortgage-Backed	37.6	—	—	—	—	37.6
Other	54.8	—	—	—	521.5	576.3
Total	\$ 18,234.4	\$ 4,257.7	\$ 2,834.7	\$ 334.0	\$ 560.9	\$ 26,221.7
Percent of Total	70 %	16 %	11 %	1 %	2 %	100 %

Credit quality indicators are metrics that provide information regarding the relative credit risk of debt securities. Northern Trust maintains a high quality debt securities portfolio, with 96% and 97% of the HTM portfolio at September 30, 2024 and December 31, 2023, respectively, comprised of securities rated A or higher. The remaining HTM debt securities portfolio was comprised of 1% rated BBB at both September 30, 2024 and December 31, 2023 and 3% and 2% which were not rated by Moody's, S&P Global, or Fitch Ratings at September 30, 2024 and December 31, 2023, respectively. Securities not explicitly rated were grouped where possible under the credit rating of the issuer of the security.

Investment Security Gains and Losses. There were no sales of debt securities and no net investment security gains (losses) for the three months ended September 30, 2024. Proceeds of \$17.1 million from the sale of debt securities resulted in an investment security gain of less than \$0.1 million for the three months ended September 30, 2023. Proceeds of \$2.0 billion from the sale of debt securities resulted in investment security loss of \$189.3 million for the nine months ended September 30, 2024. Proceeds of \$2.2 billion from the sale of debt securities resulted in investment security gains of \$6.9 million for the nine months ended September 30, 2023.

TABLE 46: INVESTMENT SECURITY GAINS AND LOSSES

(In Millions)	THREE MONTHS ENDED SEPTEMBER 30,		NINE MONTHS ENDED SEPTEMBER 30,	
	2024	2023	2024	2023
Gross Realized Debt Securities Gains	\$ —	\$ —	\$ 185.2	\$ 213.0
Gross Realized Debt Securities Losses	—	—	(374.5)	(206.1)
Investment Security Gains (Losses), net	\$ —	\$ —	\$ (189.3)	\$ 6.9

TABLE 47: INVESTMENT SECURITY GAINS AND LOSSES BY SECURITY TYPE

(In Millions)	THREE MONTHS ENDED SEPTEMBER 30,		NINE MONTHS ENDED SEPTEMBER 30,	
	2024	2023	2024	2023
U.S. Government	\$ —	\$ —	\$ (34.8)	\$ —
Obligations of States and Political Subdivisions	—	—	—	9.8
Government Sponsored Agency	—	—	(23.0)	—
Corporate Debt	—	—	—	(1.2)
Covered Bonds	—	—	(4.2)	—
Sub-Sovereign, Supranational and Non-U.S. Agency Bonds	—	—	(48.2)	—
Other Asset-Backed	—	—	(56.5)	(0.8)
Commercial Mortgage-Backed	—	—	(22.6)	(0.9)
Investment Security Gains (Losses), net	\$ —	\$ —	\$ (189.3)	\$ 6.9

Notes to Consolidated Financial Statements (unaudited) (continued)

Note 5 – Loans

Amounts outstanding for Loans, by segment and class, are shown in the following table.

TABLE 48: LOANS

(In Millions)	SEPTEMBER 30, 2024	DECEMBER 31, 2023
Commercial		
Commercial and Institutional ⁽¹⁾	\$ 10,391.3	\$ 11,555.3
Commercial Real Estate	5,251.0	5,134.2
Non-U.S. ⁽¹⁾	2,742.6	2,778.5
Other	2,448.9	5,944.8
Total Commercial	20,833.8	25,412.8
Personal		
Private Client	14,195.5	14,360.0
Residential Real Estate	6,141.2	6,327.1
Non-U.S.	457.2	428.8
Other	322.6	1,088.3
Total Personal	21,116.5	22,204.2
Total Loans	\$ 41,950.3	\$ 47,617.0

⁽¹⁾ Commercial and institutional and commercial-non-U.S. combined include \$3.8 billion and \$4.5 billion of private equity capital call finance loans at September 30, 2024 and December 31, 2023, respectively.

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 80% 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. In general, 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, 2024 and December 31, 2023, equity credit lines totaled \$221.1 million and \$228.7 million, respectively, and equity credit lines for which first liens were held by Northern Trust represented 98% and 96% of the total equity credit lines, respectively.

Included within the commercial-other, commercial-non-U.S., and personal-other classes are short-duration advances primarily related to the processing of custodied client investments, totaling \$4.5 billion and \$8.4 billion at September 30, 2024 and December 31, 2023, respectively. Demand deposit overdrafts reclassified as loan balances, primarily in personal-other, totaled \$19.0 million and \$12.1 million at September 30, 2024 and December 31, 2023, respectively.

Loans classified as held for sale are recorded at the lower of cost or fair value. There were no loans classified as held for sale at September 30, 2024 or December 31, 2023. There were no loans sold for the three and nine months ended September 30, 2024 and September 30, 2023.

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

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 and management reporting. Risk ratings are used for ranking the credit risk of borrowers and their probability of default. Each borrower is rated using one of a number of ratings models, which consider both quantitative and qualitative factors. The ratings models vary among classes of loans 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 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;
- 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

Notes to Consolidated Financial Statements (unaudited) (continued)

borrowers. Borrower risk ratings are monitored and are revised when events or circumstances indicate a change is required. Risk ratings are generally validated at least annually.

Loan segment and class balances as of September 30, 2024 and December 31, 2023 are provided in the following table, segregated by borrower ratings into “1 to 3,” “4 to 5” and “6 to 9” (watch list and nonaccrual status) categories by year of origination at amortized cost basis. Loans that are held for investment are reported at the principal amount outstanding, net of unearned income.

Notes to Consolidated Financial Statements (unaudited) (continued)

TABLE 49: CREDIT QUALITY INDICATOR AT AMORTIZED COST BASIS BY ORIGINATION YEAR

September 30, 2024	TERM LOANS						REVOLVING LOANS	REVOLVING LOANS CONVERTED TO TERM LOANS	TOTAL
	2024	2023	2022	2021	2020	PRIOR			
Commercial									
Commercial and Institutional									
Risk Rating:									
1 to 3 Category	\$ 322.6	\$ 247.5	\$ 371.2	\$ 588.1	\$ 66.1	\$ 381.0	\$ 4,222.0	\$ 21.3	\$ 6,219.8
4 to 5 Category	544.9	538.1	458.1	494.4	103.8	141.9	1,513.4	56.3	3,850.9
6 to 9 Category	34.9	81.4	63.0	81.5	2.3	2.3	48.2	7.0	320.6
Total Commercial and Institutional	902.4	867.0	892.3	1,164.0	172.2	525.2	5,783.6	84.6	10,391.3
C&I Gross Charge-offs	—	(7.3)	(1.3)	—	—	—	—	—	(8.6)
Commercial Real Estate									
Risk Rating:									
1 to 3 Category	97.3	339.5	289.1	219.5	18.8	68.5	53.7	—	1,086.4
4 to 5 Category	274.1	1,669.7	1,048.1	436.2	193.2	200.1	159.6	5.3	3,986.3
6 to 9 Category	14.1	16.0	126.4	17.1	4.3	0.4	—	—	178.3
Total Commercial Real Estate	385.5	2,025.2	1,463.6	672.8	216.3	269.0	213.3	5.3	5,251.0
Commercial Real Estate Gross Charge-offs	—	—	(2.4)	—	—	—	—	—	(2.4)
Non-U.S.									
Risk Rating:									
1 to 3 Category	1,215.8	24.2	—	—	117.7	30.2	577.0	—	1,964.9
4 to 5 Category	606.0	16.5	0.8	1.2	—	69.3	69.6	—	763.4
6 to 9 Category	0.5	—	13.8	—	—	—	—	—	14.3
Total Non-U.S.	1,822.3	40.7	14.6	1.2	117.7	99.5	646.6	—	2,742.6
Other									
Risk Rating:									
1 to 3 Category	1,183.9	—	—	—	—	—	—	—	1,183.9
4 to 5 Category	1,264.9	—	—	—	—	—	—	—	1,264.9
6 to 9 Category	0.1	—	—	—	—	—	—	—	0.1
Total Other	2,448.9	—	—	—	—	—	—	—	2,448.9
Other Gross Charge-offs	—	—	—	—	—	—	—	—	—
Total Commercial	5,559.1	2,932.9	2,370.5	1,838.0	506.2	893.7	6,643.5	89.9	20,833.8
Commercial Gross Charge-offs	—	(7.3)	(3.7)	—	—	—	—	—	(11.0)
Personal									
Private Client									
Risk Rating:									
1 to 3 Category	206.7	80.0	39.5	38.3	19.1	39.8	4,503.2	144.1	5,070.7
4 to 5 Category	141.8	635.2	423.2	424.4	124.1	188.0	6,688.7	474.7	9,100.1
6 to 9 Category	0.1	16.3	—	—	—	—	8.3	—	24.7
Total Private Client	348.6	731.5	462.7	462.7	143.2	227.8	11,200.2	618.8	14,195.5
Private Client Gross Charge-offs	—	—	—	—	—	(0.3)	—	—	(0.3)
Residential Real Estate									
Risk Rating:									
1 to 3 Category	138.5	231.3	433.6	407.3	332.0	816.6	189.9	—	2,549.2
4 to 5 Category	134.6	224.0	664.6	706.2	678.4	940.4	165.6	2.1	3,515.9
6 to 9 Category	—	—	7.5	3.9	0.4	37.0	27.3	—	76.1
Total Residential Real Estate	273.1	455.3	1,105.7	1,117.4	1,010.8	1,794.0	382.8	2.1	6,141.2
Residential Real Estate Gross Charge-offs	—	—	—	—	—	(0.1)	—	—	(0.1)
Non-U.S.									
Risk Rating:									
1 to 3 Category	3.2	1.0	—	—	—	6.8	158.0	—	169.0
4 to 5 Category	19.6	16.0	15.3	39.3	—	19.2	163.6	7.3	280.3
6 to 9 Category	7.9	—	—	—	—	—	—	—	7.9
Total Non-U.S.	30.7	17.0	15.3	39.3	—	26.0	321.6	7.3	457.2
Other									
Risk Rating:									
1 to 3 Category	199.4	—	—	—	—	—	—	—	199.4
4 to 5 Category	123.1	—	—	—	—	—	—	—	123.1
6 to 9 Category	0.1	—	—	—	—	—	—	—	0.1
Total Other	322.6	—	—	—	—	—	—	—	322.6
Total Personal	975.0	1,203.8	1,583.7	1,619.4	1,154.0	2,047.8	11,904.6	628.2	21,116.5
Personal Gross Charge-offs	—	—	—	—	—	(0.4)	—	—	(0.4)
Total Loans	\$ 6,534.1	\$ 4,136.7	\$ 3,954.2	\$ 3,457.4	\$ 1,660.2	\$ 2,941.5	\$ 18,548.1	\$ 718.1	\$ 41,950.3
Total Loans Gross Charge-offs	\$ —	\$ (7.3)	\$ (3.7)	\$ —	\$ —	\$ (0.4)	\$ —	\$ —	\$ (11.4)

Notes to Consolidated Financial Statements (unaudited) (continued)

December 31, 2023 (In Millions)	TERM LOANS						REVOLVING LOANS	REVOLVING LOANS CONVERTED TO TERM LOANS	TOTAL
	2023	2022	2021	2020	2019	PRIOR			
Commercial									
Commercial and Institutional									
Risk Rating:									
1 to 3 Category	\$ 443.9	\$ 534.1	\$ 668.3	\$ 78.1	\$ 137.2	\$ 409.9	\$ 4,909.8	\$ 15.0	\$ 7,196.3
4 to 5 Category	801.4	790.9	729.5	138.7	120.5	178.7	1,332.4	72.0	4,164.1
6 to 9 Category	13.8	70.0	60.8	12.0	0.1	1.7	34.7	1.8	194.9
Total Commercial and Institutional	1,259.1	1,395.0	1,458.6	228.8	257.8	590.3	6,276.9	88.8	11,555.3
Commercial Real Estate									
Risk Rating:									
1 to 3 Category	403.6	389.9	159.1	23.9	37.8	44.8	51.0	—	1,110.1
4 to 5 Category	1,513.5	1,208.8	521.0	218.4	252.8	96.0	136.3	7.9	3,954.7
6 to 9 Category	16.1	—	30.5	—	8.2	14.6	—	—	69.4
Total Commercial Real Estate	1,933.2	1,598.7	710.6	242.3	298.8	155.4	187.3	7.9	5,134.2
CRE Gross Charge-offs	(0.7)	(4.4)	—	—	—	—	—	—	(5.1)
Non-U.S.									
Risk Rating:									
1 to 3 Category	487.9	—	43.2	65.2	34.2	3.3	760.0	—	1,393.8
4 to 5 Category	974.7	0.8	—	—	—	150.0	243.4	—	1,368.9
6 to 9 Category	1.5	14.3	—	—	—	—	—	—	15.8
Total Non-U.S.	1,464.1	15.1	43.2	65.2	34.2	153.3	1,003.4	—	2,778.5
Other									
Risk Rating:									
1 to 3 Category	4,313.2	—	—	—	—	—	—	—	4,313.2
4 to 5 Category	1,631.6	—	—	—	—	—	—	—	1,631.6
Total Other	5,944.8	—	—	—	—	—	—	—	5,944.8
Other Gross Charge-offs	(0.6)	—	—	—	—	—	—	—	(0.6)
Total Commercial	10,601.2	3,008.8	2,212.4	536.3	590.8	899.0	7,467.6	96.7	25,412.8
Commercial Gross Charge-offs	(1.3)	(4.4)	—	—	—	—	—	—	(5.7)
Personal									
Private Client									
Risk Rating:									
1 to 3 Category	504.7	140.8	52.3	67.5	8.7	134.7	5,320.9	168.1	6,397.7
4 to 5 Category	290.1	488.2	655.1	100.9	158.8	44.7	5,721.5	447.8	7,907.1
6 to 9 Category	23.6	0.3	—	—	—	18.3	13.0	—	55.2
Total Private Client	818.4	629.3	707.4	168.4	167.5	197.7	11,055.4	615.9	14,360.0
Residential Real Estate									
Risk Rating:									
1 to 3 Category	278.7	464.0	500.6	373.3	142.4	722.4	219.8	—	2,701.2
4 to 5 Category	191.6	694.9	717.4	686.7	290.0	805.3	170.3	—	3,556.2
6 to 9 Category	—	10.9	—	0.7	1.6	43.6	12.9	—	69.7
Total Residential Real Estate	470.3	1,169.8	1,218.0	1,060.7	434.0	1,571.3	403.0	—	6,327.1
RRE Gross Charge-offs	(0.8)	—	—	—	—	(1.0)	—	—	(1.8)
Non-U.S.									
Risk Rating:									
1 to 3 Category	15.5	—	0.6	—	—	4.6	71.4	—	92.1
4 to 5 Category	12.7	16.0	39.2	—	16.4	8.9	236.1	7.4	336.7
6 to 9 Category	—	—	—	—	—	—	—	—	—
Total Non-U.S.	28.2	16.0	39.8	—	16.4	13.5	307.5	7.4	428.8
Other									
Risk Rating:									
1 to 3 Category	461.7	—	—	—	—	—	—	—	461.7
4 to 5 Category	626.6	—	—	—	—	—	—	—	626.6
Total Other	1,088.3	—	—	—	—	—	—	—	1,088.3
Total Personal	2,405.2	1,815.1	1,965.2	1,229.1	617.9	1,782.5	11,765.9	623.3	22,204.2
Personal Gross Charge-Offs	\$ (0.8)	\$ —	\$ —	\$ —	\$ —	\$ (1.0)	\$ —	\$ —	\$ (1.8)
Total Loans	13,006.4	4,823.9	4,177.6	1,765.4	1,208.7	2,681.5	19,233.5	720.0	47,617.0
Total Loans Gross Charge-Offs	\$ (2.1)	\$ (4.4)	\$ —	\$ —	\$ —	\$ (1.0)	\$ —	\$ —	\$ (7.5)

Notes to Consolidated Financial Statements (unaudited) (continued)

Past Due Status. Past due status is based on the length of time from 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 table provides balances and delinquency status of accrual and nonaccrual loans by segment and class, as well as the other real estate owned and nonaccrual asset balances, as of September 30, 2024 and December 31, 2023.

TABLE 50: DELINQUENCY STATUS

(In Millions)	ACCRUAL					NONACCRUAL	TOTAL LOANS	NONACCRUAL WITH NO ALLOWANCE
	CURRENT	30 – 59 DAYS PAST DUE	60 – 89 DAYS PAST DUE	90 DAYS OR MORE PAST DUE	TOTAL ACCRUAL			
September 30, 2024								
Commercial								
Commercial and Institutional	\$ 10,246.1	\$ 65.3	\$ 16.4	\$ 55.4	\$ 10,383.2	\$ 8.1	\$ 10,391.3	\$ 8.1
Commercial Real Estate	5,220.6	19.8	5.0	—	5,245.4	5.6	5,251.0	5.6
Non-U.S.	2,691.6	46.9	—	3.6	2,742.1	0.5	2,742.6	—
Other	2,448.9	—	—	—	2,448.9	—	2,448.9	—
Total Commercial	20,607.2	132.0	21.4	59.0	20,819.6	14.2	20,833.8	13.7
Personal								
Private Client	14,015.9	131.1	18.3	28.2	14,193.5	2.0	14,195.5	—
Residential Real Estate	6,086.6	8.5	23.0	—	6,118.1	23.1	6,141.2	23.1
Non-U.S.	457.1	0.1	—	—	457.2	—	457.2	—
Other	322.6	—	—	—	322.6	—	322.6	—
Total Personal	20,882.2	139.7	41.3	28.2	21,091.4	25.1	21,116.5	23.1
Total Loans	\$ 41,489.4	\$ 271.7	\$ 62.7	\$ 87.2	\$ 41,911.0	\$ 39.3	\$ 41,950.3	\$ 36.8
					Other Real Estate Owned	\$ —		
					Total Nonaccrual Assets	\$ 39.3		

(In Millions)	ACCRUAL					NONACCRUAL	TOTAL LOANS	NONACCRUAL WITH NO ALLOWANCE
	CURRENT	30 – 59 DAYS PAST DUE	60 – 89 DAYS PAST DUE	90 DAYS OR MORE PAST DUE	TOTAL ACCRUAL			
December 31, 2023								
Commercial								
Commercial and Institutional	\$ 11,374.6	\$ 163.7	\$ 0.7	\$ —	\$ 11,539.0	\$ 16.3	\$ 11,555.3	\$ 4.1
Commercial Real Estate	5,123.7	4.4	6.1	—	5,134.2	—	5,134.2	—
Non-U.S.	2,778.5	—	—	—	2,778.5	—	2,778.5	—
Other	5,944.8	—	—	—	5,944.8	—	5,944.8	—
Total Commercial	25,221.6	168.1	6.8	—	25,396.5	16.3	25,412.8	4.1
Personal								
Private Client	14,240.0	63.9	24.8	11.0	14,339.7	20.3	14,360.0	18.3
Residential Real Estate	6,283.0	7.5	0.5	9.1	6,300.1	27.0	6,327.1	27.0
Non-U.S.	428.2	—	0.6	—	428.8	—	428.8	—
Other	1,088.3	—	—	—	1,088.3	—	1,088.3	—
Total Personal	22,039.5	71.4	25.9	20.1	22,156.9	47.3	22,204.2	45.3
Total Loans	\$ 47,261.1	\$ 239.5	\$ 32.7	\$ 20.1	\$ 47,553.4	\$ 63.6	\$ 47,617.0	\$ 49.4
					Other Real Estate Owned	\$ 1.5		
					Total Nonaccrual Assets	\$ 65.1		

Interest income that would have been recorded for nonaccrual loans in accordance with their original terms was \$0.5 million and \$1.7 million for the three and nine months ended September 30, 2024, respectively, and \$0.9 million and \$2.3 million for the three and nine months ended September 30, 2023, respectively.

Northern Trust may obtain physical possession of real estate via foreclosure or an in-substance repossession. As of September 30, 2024 and December 31, 2023, Northern Trust held foreclosed real estate properties with an immaterial carrying value as a result of obtaining physical possession. In addition, as of September 30, 2024 and December 31, 2023, Northern Trust had loans with a carrying value of \$5.2 million and \$3.5 million, respectively, for which formal foreclosure proceedings were in process.

Loan Modifications to Borrowers Experiencing Financial Difficulty

For borrowers experiencing financial difficulties, Northern Trust may provide payment relief by modifying the terms of the original loan. Loan modifications to borrowers experiencing financial difficulty involve primarily extensions of term, deferrals of principal and interest, interest rate concessions, and other modifications or a combination thereof. Northern Trust considers payment deferrals of less than 90 days as insignificant, absent any material modifications to other loan terms.

Loan modifications were immaterial for both the three and nine months ended September 30, 2024 and September 30, 2023, respectively.

The effectiveness of Northern Trust's modification efforts is measured by the loans' respective past due status under the modified terms as of the end of the period. At September 30, 2024, loans that were modified in the previous 12 months and that are now past due by more than 90 days totaled less than \$1 million. No modified loans were considered past-due for purposes of these disclosures as of September 30, 2023. As of the three months ended September 30, 2024, Northern Trust had no charge offs related to modifications to borrowers experiencing financial difficulty that had been modified in the last 12 months. As of the nine months ended September 30, 2024, Northern Trust had \$8.5 million charged off related to modifications to borrowers experiencing financial difficulty that had been modified in the last 12 months. As of the three and nine months ended September 30, 2023, Northern Trust had charge offs of less than \$1 million related to modifications to borrowers experiencing financial difficulty that had been modified in the last 12 months.

There were no undrawn loan commitments or standby letters of credit issued to financially distressed borrowers for which Northern Trust has modified the payment terms of the loans as of September 30, 2024 and December 31, 2023, respectively.

The expected credit loss for nonaccrual loans including loan modifications to borrowers experiencing financial difficulty is measured based on either the expected future cash flows, the value of collateral, or other factors that may impact the borrower's ability to pay. If the discounted cash flow method is utilized, the credit loss is measured based upon the present value of expected future cash flows, discounted at the effective interest rate based on the post-modification contractual rate. If a loan's contractual interest rate varies based on subsequent changes in an independent factor, such as an index or rate, the loan's effective interest rate is calculated based on the factor as it changes over the life of the loan. Northern Trust elected not to project changes in the factor for purposes of estimating expected future cash flows. Further, Northern Trust elected not to adjust the effective interest rate for prepayments. If the loan is collateral dependent, the expected loss is measured based on the fair value of the collateral at the reporting date. If the loan valuation is less than the recorded value of the loan, either an allowance is established or a charge-off is recorded for the difference. The nature and extent of further deterioration in credit quality, including a subsequent default, is considered in the determination of an appropriate level of allowance for credit losses for all loan modifications to borrowers experiencing financial difficulty.

Note 6 – Allowance for Credit Losses

Allowance and Provision for Credit Losses. The allowance for credit losses—which represents management's best estimate of lifetime expected credit losses related to various portfolios subject to credit risk, off-balance-sheet credit exposures, and specific borrower relationships—is determined by management through a disciplined credit review process. Northern Trust measures expected credit losses of financial assets with similar risk characteristics on a collective basis. A financial asset is measured individually if it does not share similar risk characteristics with other financial assets and the related allowance is determined through an individual evaluation.

Management's estimates utilized in establishing an appropriate level of allowance for credit losses are not dependent on any single assumption. In determining an appropriate allowance level, management evaluates numerous variables and takes into consideration past events, current conditions, and reasonable and supportable forecasts.

The results of the credit reserve estimation methodology are reviewed quarterly by Northern Trust's Credit Loss Reserve Committee, which receives input from Financial Risk Management, Treasury, Corporate Finance, the Economic Research Department, and each of Northern Trust's reporting business units. The Credit Loss Reserve Committee determines the probability weights applied to each forecast approved by Northern Trust's Macroeconomic Scenario Development Committee, and also reviews and approves qualitative adjustments to the collective allowance in line with Northern Trust's qualitative adjustment framework.

The Provision for Credit Losses on the consolidated statements of income represents the change in the Allowance for Credit Losses on the consolidated balance sheets after accounting for net charge-offs or recoveries and is the charge to current period earnings. It represents the amount needed to maintain the Allowance for Credit Losses on the consolidated balance sheets at an appropriate level to absorb lifetime expected credit losses related to financial assets in scope. Actual losses may vary from current estimates and the amount of the Provision for Credit Losses may be either greater or less than actual net charge-offs.

The following table provides information regarding changes in the total Allowance for Credit Losses during the three and nine months ended September 30, 2024 and 2023.

Notes to Consolidated Financial Statements (unaudited) (continued)
TABLE 51: CHANGES IN THE ALLOWANCE FOR CREDIT LOSSES

(In Millions)	THREE MONTHS ENDED SEPTEMBER 30, 2024					TOTAL
	LOANS	UNDRAWN LOAN COMMITMENTS AND STANDBY LETTERS OF CREDIT	HELD TO MATURITY DEBT SECURITIES	OTHER FINANCIAL ASSETS		
Balance at Beginning of Period	\$ 167.7	\$ 29.5	\$ 10.9	\$ 0.9	\$	209.0
Charge-Offs	—	—	—	—	—	—
Recoveries	2.4	—	—	—	—	2.4
Net Recoveries (Charge-Offs)	2.4	—	—	—	—	2.4
Provision for Credit Losses ⁽¹⁾	14.7	(3.0)	(3.4)	0.1		8.4
Balance at End of Period	\$ 184.8	\$ 26.5	\$ 7.5	\$ 1.0	\$	219.8

⁽¹⁾ The table excludes a negative provision for credit losses of \$0.4 million for the three months ended September 30, 2024 for AFS debt securities. See further detail in Note 4—Securities.

(In Millions)	NINE MONTHS ENDED SEPTEMBER 30, 2024					TOTAL
	LOANS	UNDRAWN LOAN COMMITMENTS AND STANDBY LETTERS OF CREDIT	DEBT SECURITIES HELD TO MATURITY	OTHER FINANCIAL ASSETS		
Balance at Beginning of Period	\$ 178.7	\$ 26.9	\$ 12.7	\$ 0.9	\$	219.2
Charge-Offs	(11.4)	—	—	—	—	(11.4)
Recoveries	3.5	—	—	—	—	3.5
Net Recoveries (Charge-Offs)	(7.9)	—	—	—	—	(7.9)
Provision for Credit Losses ⁽¹⁾	14.0	(0.4)	(5.2)	0.1		8.5
Balance at End of Period	\$ 184.8	\$ 26.5	\$ 7.5	\$ 1.0	\$	219.8

⁽¹⁾ The table excludes a negative provision for credit losses of \$1.0 million for the nine months ended September 30, 2024 for AFS debt securities. See further detail in Note 4—Securities.

(In Millions)	THREE MONTHS ENDED SEPTEMBER 30, 2023					TOTAL
	LOANS	UNDRAWN LOAN COMMITMENTS AND STANDBY LETTERS OF CREDIT	HELD TO MATURITY DEBT SECURITIES	OTHER FINANCIAL ASSETS		
Balance at Beginning of Period	\$ 152.5	\$ 26.0	\$ 16.7	\$ 1.0	\$	196.2
Charge-Offs	(0.8)	—	—	—	—	(0.8)
Recoveries	1.1	—	—	—	—	1.1
Net Recoveries (Charge-Offs)	0.3	—	—	—	—	0.3
Provision for Credit Losses ⁽¹⁾	14.0	2.3	(1.8)	0.1		14.6
Balance at End of Period	\$ 166.8	\$ 28.3	\$ 14.9	\$ 1.1	\$	211.1

⁽¹⁾ The table excludes a negative provision for credit losses of \$0.6 million for the three months ended September 30, 2023 for AFS debt securities. See further detail in Note 4—Securities.

(In Millions)	NINE MONTHS ENDED SEPTEMBER 30, 2023					TOTAL
	LOANS	UNDRAWN LOAN COMMITMENTS AND STANDBY LETTERS OF CREDIT	HELD TO MATURITY DEBT SECURITIES	OTHER FINANCIAL ASSETS		
Balance at Beginning of Period	\$ 144.3	\$ 38.5	\$ 16.0	\$ 0.8	\$	199.6
Charge-Offs	(5.6)	—	—	—	—	(5.6)
Recoveries	3.0	—	—	—	—	3.0
Net Recoveries (Charge-Offs)	(2.6)	—	—	—	—	(2.6)
Provision for Credit Losses ⁽¹⁾	25.1	(10.2)	(1.1)	0.3		14.1
Balance at End of Period	\$ 166.8	\$ 28.3	\$ 14.9	\$ 1.1	\$	211.1

⁽¹⁾ The table excludes a negative provision for credit losses of \$0.6 million for the nine months ended September 30, 2023 for AFS debt securities. See further detail in Note 4—Securities.

Excluding the impact of the negative provision for AFS debt securities, there was a Provision for Credit Losses of \$8.4 million in the current quarter, as compared to a provision of \$14.6 million in the prior-year quarter. The provision resulted from an increase in both the collective and individual reserves. The increase in collective reserves was primarily driven by a small number of downgrades and extensions in the Commercial and Institutional (C&I) portfolio. The reserve evaluated on a collective basis relates to pooled financial assets sharing similar risk characteristics. The increase in individual reserves was driven by the default of one C&I loan. There were net recoveries of \$2.4 million during the three months ended September 30, 2024, while there were \$0.3 million net recoveries for the three months ended September 30, 2023. For further detail, please see the Allowance for the Loan Portfolio and the Allowance for Held to Maturity Debt Securities Portfolio sections below.

Notes to Consolidated Financial Statements (unaudited) (continued)

Excluding the impact of the negative provision for AFS debt securities, there was a Provision for Credit Losses of \$8.5 million for the nine months ended September 30, 2024, as compared to a \$14.1 million provision in the prior-year period. The provision was primarily due to an increase in collective reserves, partially offset by a decrease in individual reserves. The increase in collective reserves was primarily driven by a small number of downgrades and extensions in the C&I portfolio and by expectations for weaker prices in the CRE portfolio. The decrease in individual reserves was driven by one C&I loan charge-off in the first quarter, partially offset by the default of one C&I loan in the current quarter. There were net charge-offs of \$7.9 million during the nine months ended September 30, 2024, as compared to net charge-offs of \$2.6 million during the nine months ended September 30, 2023. For further detail, please see the Allowance for the Loan Portfolio and the Allowance for Held to Maturity Debt Securities Portfolio sections below.

The portion of the allowance assigned to loans, HTM debt securities, and other financial assets is presented as a contra asset in Allowance for Credit Losses on the consolidated balance sheets. The portion of the allowance assigned to undrawn loan commitments and standby letters of credit is reported in Other Liabilities on the consolidated balance sheets. For credit exposure and the associated allowance related to fee receivables, please refer to Note 13—Revenue from Contracts with Clients. For information related to the allowance for AFS debt securities, please refer to Note 4—Securities. For all other financial assets recognized at amortized cost, which includes Cash and Due from Banks, Other Central Bank Deposits, Interest Bearing Deposits with Banks, and Other Assets, please refer to the Allowance for Other Financial Assets section within this footnote.

Forecasting and Reversion. Estimating expected lifetime credit losses requires the consideration of the effect of future economic conditions. Northern Trust employs multiple scenarios over a reasonable and supportable period (currently two years) to project future conditions. Key variables determined to be relevant for projecting credit losses on the portfolios in scope include macroeconomic factors, such as corporate profits, unemployment, disposable income, and real estate price indices, as well as financial market factors such as market volatility and credit spreads. For periods beyond the reasonable and supportable period, Northern Trust reverts to its own historical loss experiences on a straight-line basis over four quarters. The primary forecast in the current quarter reflects an outlook of steady growth, despite modest deterioration within the Commercial Real Estate industry, with inflation and labor markets stabilizing and interest rates falling. Recognizing the uncertainty in the primary forecast, an alternative scenario is also considered, which reflects a recession that incorporates the experiences of a wider set of historical economic cycles.

Contractual Term. Northern Trust estimates expected credit losses over the contractual term of the financial assets adjusted for prepayments, unless prepayments are not relevant to specific portfolios or sub-portfolios. Extension and renewal options are typically not considered since it is not Northern Trust's practice to enter into arrangements where the borrower has the unconditional option to renew, or a conditional extension option whereby the conditions are beyond Northern Trust's control.

Notes to Consolidated Financial Statements (unaudited) (continued)

Allowance for the Loan Portfolio. The following table provides information regarding changes in the total Allowance for Credit Losses related to loans, including undrawn loan commitments and standby letters of credit, by segment during the three and nine months ended September 30, 2024 and 2023.

TABLE 52: CHANGES IN THE ALLOWANCE FOR CREDIT LOSSES RELATED TO LOANS

(In Millions)	THREE MONTHS ENDED SEPTEMBER 30, 2024					
	LOANS			UNDRAWN LOAN COMMITMENTS AND STANDBY LETTERS OF CREDIT		
	COMMERCIAL	PERSONAL	TOTAL	COMMERCIAL	PERSONAL	TOTAL
Balance at Beginning of Period	\$ 136.9	\$ 30.8	\$ 167.7	\$ 27.2	\$ 2.3	\$ 29.5
Charge-Offs	—	—	—	—	—	—
Recoveries	—	2.4	2.4	—	—	—
Net Recoveries (Charge-Offs)	—	2.4	2.4	—	—	—
Provision for Credit Losses	15.7	(1.0)	14.7	(2.7)	(0.3)	(3.0)
Balance at End of Period	\$ 152.6	\$ 32.2	\$ 184.8	\$ 24.5	\$ 2.0	\$ 26.5

(In Millions)	NINE MONTHS ENDED SEPTEMBER 30, 2024					
	LOANS			UNDRAWN LOAN COMMITMENTS AND STANDBY LETTERS OF CREDIT		
	COMMERCIAL	PERSONAL	TOTAL	COMMERCIAL	PERSONAL	TOTAL
Balance at Beginning of Period	\$ 146.8	\$ 31.9	\$ 178.7	\$ 24.9	\$ 2.0	\$ 26.9
Charge-Offs	(11.0)	(0.4)	(11.4)	—	—	—
Recoveries	—	3.5	3.5	—	—	—
Net Recoveries (Charge-Offs)	(11.0)	3.1	(7.9)	—	—	—
Provision for (Release of) Credit Losses	16.8	(2.8)	14.0	(0.4)	—	(0.4)
Balance at End of Period	\$ 152.6	\$ 32.2	\$ 184.8	\$ 24.5	\$ 2.0	\$ 26.5

(In Millions)	THREE MONTHS ENDED SEPTEMBER 30, 2023					
	LOANS			UNDRAWN LOAN COMMITMENTS AND STANDBY LETTERS OF CREDIT		
	COMMERCIAL	PERSONAL	TOTAL	COMMERCIAL	PERSONAL	TOTAL
Balance at Beginning of Period	\$ 124.0	\$ 28.5	\$ 152.5	\$ 23.3	\$ 2.7	\$ 26.0
Charge-Offs	(0.5)	(0.3)	(0.8)	—	—	—
Recoveries	—	1.1	1.1	—	—	—
Net Recoveries (Charge-Offs)	(0.5)	0.8	0.3	—	—	—
Provision for Credit Losses	13.9	0.1	14.0	2.2	0.1	2.3
Balance at End of Period	\$ 137.4	\$ 29.4	\$ 166.8	\$ 25.5	\$ 2.8	\$ 28.3

(In Millions)	NINE MONTHS ENDED SEPTEMBER 30, 2023					
	LOANS			UNDRAWN LOAN COMMITMENTS AND STANDBY LETTERS OF CREDIT		
	COMMERCIAL	PERSONAL	TOTAL	COMMERCIAL	PERSONAL	TOTAL
Balance at Beginning of Period	\$ 116.2	\$ 28.1	\$ 144.3	\$ 36.3	\$ 2.2	\$ 38.5
Charge-Offs	(4.5)	(1.1)	(5.6)	—	—	—
Recoveries	0.1	2.9	3.0	—	—	—
Net Recoveries (Charge-Offs)	(4.4)	1.8	(2.6)	—	—	—
Provision for (Release of) Credit Losses	25.6	(0.5)	25.1	(10.8)	0.6	(10.2)
Balance at End of Period	\$ 137.4	\$ 29.4	\$ 166.8	\$ 25.5	\$ 2.8	\$ 28.3

Allowance Related to Credit Exposure Evaluated on a Collective Basis. Expected credit losses are measured on a collective basis as long as the financial assets included in the respective pool share similar risk characteristics. If financial assets are deemed to not share similar risk characteristics, an individual assessment is warranted.

The allowance estimation methodology for the collective assessment is based on data representative of the Corporation's financial asset portfolio from a historical observation period that includes both expansionary and recessionary periods. The estimation methodology and the related qualitative adjustment framework segregate the loan portfolio into homogeneous segments based on similar risk characteristics or risk monitoring methods.

Notes to Consolidated Financial Statements (unaudited) (continued)

Northern Trust utilizes a quantitative probability of default/loss given default approach for the calculation of its credit allowance on a collective basis. For each of the different parameters, specific credit models or qualitative estimation methodologies for the individual loan segments were developed. For each segment, the probability of default and the loss given default are applied to the exposure at default for each projected quarter to determine the quantitative component of the allowance. The quantitative allowance is then reviewed within the qualitative adjustment framework, through which management applies judgment by assessing internal risk factors, potential limitations in the quantitative methodology, and environmental factors that are not fully contemplated in the forecast to compute an adjustment to the quantitative allowance for each segment and class of the loan portfolio.

Allowance Related to Credit Exposure Evaluated on an Individual Basis. The individual allowance is determined through individual evaluation of loans and lending-related commitments that have defaulted, generally those with borrower ratings of 8 and 9, that are based on expected future cash flows, the value of collateral, and other factors that may impact the borrower's ability to pay. For defaulted loans for which the amount of allowance, if any, is determined based on the value of the underlying real estate collateral, third-party appraisals are typically obtained and utilized by management. These appraisals are generally less than twelve months old and are subject to adjustments to reflect management's judgment as to the realizable value of the collateral.

The following table provides information regarding the recorded investments in loans and the Allowance for Credit Losses for loans and undrawn loan commitments and standby letters of credit by segment as of September 30, 2024 and December 31, 2023.

TABLE 53: RECORDED INVESTMENTS IN LOANS

(In Millions)	SEPTEMBER 30, 2024			DECEMBER 31, 2023		
	COMMERCIAL	PERSONAL	TOTAL	COMMERCIAL	PERSONAL	TOTAL
Loans						
Evaluated on an Individual Basis	\$ 38.1	\$ 35.3	\$ 73.4	\$ 33.7	\$ 62.6	\$ 96.3
Evaluated on a Collective Basis	20,795.7	21,081.2	41,876.9	25,379.1	22,141.6	47,520.7
Total Loans	20,833.8	21,116.5	41,950.3	25,412.8	22,204.2	47,617.0
Allowance for Credit Losses on Loans						
Evaluated on an Individual Basis	3.3	2.2	5.5	11.4	2.0	13.4
Evaluated on a Collective Basis	149.3	30.0	179.3	135.4	29.9	165.3
Allowance Assigned to Loans	152.6	32.2	184.8	146.8	31.9	178.7
Allowance Assigned to Undrawn Loan Commitments and Standby Letters of Credit - Evaluated on a Collective Basis						
	24.5	2.0	26.5	24.9	2.0	26.9
Total Allowance Assigned to Loans and Undrawn Loan Commitments and Standby Letters of Credit	\$ 177.1	\$ 34.2	\$ 211.3	\$ 171.7	\$ 33.9	\$ 205.6

Northern Trust analyzes its exposure to credit losses from both on-balance-sheet and off-balance-sheet activity using a consistent methodology for the quantitative framework as well as the qualitative framework. For purposes of estimating the allowance for credit losses for undrawn loan commitments and standby letters of credit, the exposure at default includes an estimated drawdown of unused credit based on credit utilization factors, resulting in a proportionate amount of expected credit losses.

Allowance for Held to Maturity Debt Securities Portfolio. The following table provides information regarding changes in the total allowance for credit losses for HTM debt securities during the three and nine months ended September 30, 2024 and 2023.

TABLE 54: CHANGES IN THE ALLOWANCE FOR CREDIT LOSSES RELATED TO HELD TO MATURITY DEBT SECURITIES

(In Millions)	THREE MONTHS ENDED SEPTEMBER 30, 2024						
	CORPORATE DEBT	NON-U.S. GOVERNMENT	SUB-SOVEREIGN, SUPRANATIONAL, AND NON-U.S. AGENCY BONDS	OBLIGATIONS OF STATES AND POLITICAL SUBDIVISIONS ⁽¹⁾	COVERED BONDS	OTHER	TOTAL
Balance at Beginning of Period	\$ 0.5	\$ 2.6	\$ 1.7	\$ 1.0	\$ 0.1	\$ 5.0	\$ 10.9
Provision for Credit Losses	—	(0.1)	(0.1)	—	(0.1)	(3.1)	(3.4)
Balance at End of Period	\$ 0.5	\$ 2.5	\$ 1.6	\$ 1.0	\$ —	\$ 1.9	\$ 7.5

⁽¹⁾ The allowance for Obligations of States and Political Subdivisions is related to (non pre-refunded) municipal securities that do not fall under Northern Trust's zero-loss assumption.

Notes to Consolidated Financial Statements (unaudited) (continued)
NINE MONTHS ENDED SEPTEMBER 30, 2024

(In Millions)	CORPORATE DEBT	NON-U.S. GOVERNMENT	SUB-SOVEREIGN, SUPRANATIONAL, AND NON-U.S. AGENCY BONDS	OBLIGATIONS OF STATES AND POLITICAL SUBDIVISIONS ⁽¹⁾	COVERED BONDS	OTHER	TOTAL
Balance at Beginning of Period	\$ 0.9	\$ 3.5	\$ 2.2	\$ 1.2	\$ 0.1	\$ 4.8	\$ 12.7
Provision for (Release of) Credit Losses	(0.4)	(1.0)	(0.6)	(0.2)	(0.1)	(2.9)	(5.2)
Balance at End of Period	\$ 0.5	\$ 2.5	\$ 1.6	\$ 1.0	\$ —	\$ 1.9	\$ 7.5

⁽¹⁾ The allowance for Obligations of States and Political Subdivisions is related to (non pre-refunded) municipal securities that do not fall under Northern Trust's zero-loss assumption.

THREE MONTHS ENDED SEPTEMBER 30, 2023

(In Millions)	CORPORATE DEBT	NON-U.S. GOVERNMENT	SUB-SOVEREIGN, SUPRANATIONAL, AND NON-U.S. AGENCY BONDS	OBLIGATIONS OF STATES AND POLITICAL SUBDIVISIONS	COVERED BONDS	OTHER	TOTAL
Balance at Beginning of Period	\$ 1.4	\$ 5.4	\$ 3.4	\$ 1.3	\$ 0.1	\$ 5.1	\$ 16.7
Provision for Credit Losses	(0.1)	(0.8)	(0.5)	(0.1)	—	(0.3)	(1.8)
Balance at End of Period	\$ 1.3	\$ 4.6	\$ 2.9	\$ 1.2	\$ 0.1	\$ 4.8	\$ 14.9

NINE MONTHS ENDED SEPTEMBER 30, 2023

(In Millions)	CORPORATE DEBT	NON-U.S. GOVERNMENT	SUB-SOVEREIGN, SUPRANATIONAL, AND NON-U.S. AGENCY BONDS	OBLIGATIONS OF STATES AND POLITICAL SUBDIVISIONS	COVERED BONDS	OTHER	TOTAL
Balance at Beginning of Period	\$ 1.9	\$ 3.6	\$ 4.0	\$ 1.5	\$ 0.1	\$ 4.9	\$ 16.0
Provision for (Release of) Credit Losses	(0.6)	1.0	(1.1)	(0.3)	—	(0.1)	(1.1)
Balance at End of Period	\$ 1.3	\$ 4.6	\$ 2.9	\$ 1.2	\$ 0.1	\$ 4.8	\$ 14.9

HTM debt securities classified as U.S. government, government sponsored agency, and certain securities classified as obligations of states and political subdivisions are considered to be guarantees of the U.S. government or an agency of the U.S. government and, therefore, an allowance for credit losses is not estimated for such investments as the expected probability of non-payment of the amortized cost basis is zero.

HTM debt securities classified as “other asset-backed securities” represent pools of underlying receivables from which the cash flows are used to pay the bonds that vary in seniority. Utilizing a qualitative estimation approach, the allowance for other asset-backed securities is assessed by evaluating underlying pool performance based on delinquency rates and available credit support.

HTM debt securities classified as “other” relate to investments purchased by Northern Trust to fulfill its obligations under the Community Reinvestment Act (CRA). Northern Trust fulfills its obligations under the CRA by making qualified investments for purposes of supporting institutions and programs that benefit low-to-moderate income communities within Northern Trust's market area. The allowance for CRA investments is assessed using a qualitative estimation approach primarily based on internal historical performance experience and default history of the underlying CRA portfolios to determine a quantitative component of the allowance.

The allowance estimation methodology for all other HTM debt securities is developed using a combination of external and internal data. The estimation methodology groups securities with shared characteristics for which the probability of default and the loss given default are applied to the total exposure at default to determine a quantitative component of the allowance.

Allowance for Other Financial Assets. The allowance for Other Financial Assets consists of the allowance for Due from Banks, Other Central Bank Deposits, Interest Bearing Deposits with Banks, and Other Assets. The Other Assets category includes other miscellaneous credit exposures reported in Other Assets on the consolidated balance sheets. The allowance estimation methodology for Other Financial Assets primarily utilizes a similar approach as the one used for the HTM debt securities portfolio. It consists of a combination of externally and internally developed loss data, adjusted for the appropriate contractual term. Northern Trust's portfolio of Other Financial Assets is composed mostly of institutions within the “1 to 2” internal borrower rating category and is expected to exhibit minimal to modest likelihood of loss. The Allowance for Credit Losses related to Other Financial Assets was \$1.0 million and \$0.9 million as of September 30, 2024 and December 31, 2023, respectively.

Accrued Interest. Accrued interest balances are reported within Other Assets on the consolidated balance sheets. Northern Trust elected not to measure an allowance for credit losses for accrued interest receivables related to its loan and securities portfolio as its policy is to write-off uncollectible accrued interest receivable balances in a timely manner. Accrued interest is written off by reversing interest income during the period the financial asset is moved from an accrual to a nonaccrual status.

Notes to Consolidated Financial Statements (unaudited) (continued)

The following table provides the amount of accrued interest excluded from the amortized cost basis of the following portfolios.

TABLE 55: ACCRUED INTEREST

(In Millions)	SEPTEMBER 30, 2024	DECEMBER 31, 2023
Loans	\$ 220.2	\$ 241.7
Debt Securities		
Held to Maturity	75.1	72.0
Available for Sale	177.2	129.2
Other Financial Assets	79.2	86.0
Total	\$ 551.7	\$ 528.9

The amount of accrued interest reversed through interest income for loans was immaterial for the three and nine months ended September 30, 2024 and 2023, and there was no accrued interest reversed through interest income related to any other financial assets for the three and nine months ended September 30, 2024 and 2023.

Note 7 – Pledged Assets, Accepted Collateral and Restricted Assets

Pledged Assets. As part of its liquidity management strategy, Northern Trust may pledge loans and/or securities to various financial market utilities to allow for client payment, clearing and settlement processing as part of our custody services. Northern Trust may also pledge loans or securities to Central Banks, Federal Home Loan Bank (FHLB) of Chicago and third parties for various purposes, for example: securing public and trust deposits, repurchase agreements, borrowings and derivative contracts.

The following table presents the carrying value of Northern Trust's pledged assets by type.

TABLE 56: TYPE OF PLEDGED ASSETS

(In Billions)	SEPTEMBER 30, 2024	DECEMBER 31, 2023
Debt Securities ⁽¹⁾	\$ 31.1	\$ 33.0
Loans ⁽²⁾	10.0	10.3
Total Pledged Assets	\$ 41.1	\$ 43.3

⁽¹⁾ Debt securities are comprised of held to maturity and available for sale securities.

⁽²⁾ Loans pledged at the FHLB of Chicago and the Federal Reserve Bank of Chicago.

As of September 30, 2024 and December 31, 2023, respectively, \$1.2 billion and \$1.1 billion of collateral pledged, related to loans and/or securities, is eligible to be repledged or sold by the secured party.

Accepted Collateral. Northern Trust accepts financial assets as collateral that it may, in some instances, be permitted to repledge or sell. The collateral is generally obtained under certain reverse repurchase agreements and derivative contracts.

The following table presents the fair value of securities accepted as collateral.

TABLE 57: ACCEPTED COLLATERAL

(In Millions)	SEPTEMBER 30, 2024	DECEMBER 31, 2023
Collateral that may be repledged or sold		
Reverse repurchase agreements ⁽¹⁾⁽²⁾	\$ 66,367.0	\$ 62,767.8
Derivative contracts	10.3	12.2
Collateral that may not be repledged or sold		
Reverse repurchase agreements	—	—
Total Collateral Accepted	\$ 66,377.3	\$ 62,780.0

⁽¹⁾ The fair value of securities collateral that was repledged or sold totaled \$65.3 billion and \$62.0 billion at September 30, 2024 and December 31, 2023, respectively.

⁽²⁾ This includes collateral accepted as related to the sponsored member program. Refer to Note 20—Commitments and Contingent Liabilities for further information.

Restricted Assets. Certain cash may be restricted in terms of usage or withdrawal. As a result of the continuing military conflict involving Ukraine and the Russian Federation and related sanctions and legal restrictions in place, cash balances denominated in Russian rubles received for the benefit of certain clients in our Asset Servicing business are subject to distribution restrictions. As of September 30, 2024 and December 31, 2023, these balances totaled \$1.0 billion and \$722.2 million, respectively, and are reported in Cash and Due from Banks on the consolidated balance sheets.

At September 30, 2024 and December 31, 2023, Northern Trust held cash of \$519.8 million and \$575.2 million, respectively, to meet non-U.S. reserve requirements. As a result of the economic environment arising from the COVID-19 pandemic, the Federal Reserve reduced the U.S. reserve requirement to zero percent on March 26, 2020. There were no average deposits

Notes to Consolidated Financial Statements (unaudited) (continued)

required to meet Federal Reserve Bank reserve requirements for the three and nine months ended September 30, 2024 and 2023, respectively.

Note 8 – Goodwill and Other Intangibles

Goodwill. Changes by reporting segment in the carrying amount of Goodwill for the nine months ended September 30, 2024, including the effect of foreign exchange rates on non-U.S. dollar denominated balances, were as follows.

TABLE 58: GOODWILL

(In Millions)		ASSET SERVICING		WEALTH MANAGEMENT		TOTAL
Balance at December 31, 2023	\$	621.9	\$	80.4	\$	702.3
Foreign Exchange Rates		5.5		—		5.5
Balance at September 30, 2024	\$	627.4	\$	80.4	\$	707.8

Other Intangible Assets Subject to Amortization. The gross carrying amount and accumulated amortization of other intangible assets subject to amortization as of September 30, 2024 and December 31, 2023 were as follows.

TABLE 59: OTHER INTANGIBLE ASSETS

(In Millions)		SEPTEMBER 30, 2024		DECEMBER 31, 2023
Gross Carrying Amount	\$	136.0	\$	135.0
Less: Accumulated Amortization		71.1		63.4
Net Book Value	\$	64.9	\$	71.6

Other intangible assets consist primarily of the value of acquired client relationships and are included within Other Assets on the consolidated balance sheets. Amortization expense related to other intangible assets totaled \$2.4 million and \$7.1 million for the three and nine months ended September 30, 2024 and \$2.3 million and \$7.0 million for the three and nine months ended September 30, 2023, respectively. Amortization for the remainder of 2024 and for the years 2025, 2026, 2027, and 2028 is estimated to be \$2.3 million, \$9.0 million, \$8.6 million, \$8.4 million, and \$7.7 million, respectively.

Capitalized Software. The gross carrying amount and accumulated amortization of capitalized software as of September 30, 2024 and December 31, 2023 were as follows.

TABLE 60: CAPITALIZED SOFTWARE

(In Millions)		SEPTEMBER 30, 2024		DECEMBER 31, 2023
Gross Carrying Amount	\$	4,256.2	\$	3,781.7
Less: Accumulated Amortization		2,197.4		1,754.2
Net Book Value	\$	2,058.8	\$	2,027.5

Capitalized software, which is included in Other Assets on the consolidated balance sheets, consists primarily of purchased software, software licenses, and allowable internal costs, including compensation relating to software developed for internal use. Fees paid for the use of software licenses that are not hosted by Northern Trust are expensed as incurred. Amortization expense, which is included in Equipment and Software expense on the consolidated statements of income, totaled \$153.1 million and \$444.1 million for the three and nine months ended September 30, 2024, respectively, and \$126.7 million and \$370.8 million for the three and nine months ended September 30, 2023, respectively.

Note 9 – Reporting Segments

Northern Trust is organized around its two client-focused reporting segments: Asset Servicing and Wealth Management. Asset management and related services are provided to Asset Servicing 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 Asset Servicing and Wealth Management.

Reporting segment financial information, presented on an internal management-reporting basis, is determined by accounting systems used to allocate revenue and expense to each segment, and incorporates processes for allocating assets, liabilities, equity and the applicable interest income and expense utilizing a funds transfer pricing (FTP) methodology. Under the methodology, assets and liabilities receive a funding charge or credit that considers interest rate risk, liquidity risk, and other product characteristics on an instrument level. Additionally, segment information is presented on an FTE basis as management believes an FTE presentation provides a clearer indication of net interest income. The adjustment to an FTE basis has no impact on Net Income.

Notes to Consolidated Financial Statements (unaudited) (continued)

Revenues, expenses and average assets are allocated to Asset Servicing and Wealth Management, with the exception of non-recurring activities such as certain corporate transactions and costs incurred associated with acquisitions, divestitures, litigation, restructuring, and tax adjustments not directly attributable to a specific reporting segment, which are reported within Other.

Effective January 2024, Northern Trust implemented certain enhancements to its FTP methodology, impacting the allocation of Net Interest Income to the Asset Servicing and Wealth Management segments. As a result, the approximate impact on the Asset Servicing and Wealth Management segments was a \$36 million decrease and a \$36 million increase in Net Interest Income, respectively, for the three months ended September 30, 2024. The approximate impact on the Asset Servicing and Wealth Management segments was a \$99 million decrease and a \$99 million increase in Net Interest Income, respectively, for the nine months ended September 30, 2024. Prior-period segment results have not been revised to reflect this methodology change.

Reporting segment results are subject to reclassification when organizational changes are made. The results are also subject to refinements in revenue and expense allocation methodologies, which are typically reflected on a prospective basis.

Notes to Consolidated Financial Statements (unaudited) (continued)

The following table presents the earnings contributions and average assets of Northern Trust's reporting segments for the three- and nine-month periods ended September 30, 2024 and 2023.

TABLE 61: RESULTS OF REPORTING SEGMENTS

(\$ In Millions)	ASSET SERVICING		WEALTH MANAGEMENT		OTHER ⁽¹⁾		RECONCILING ITEMS		TOTAL CONSOLIDATED	
	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023
THREE MONTHS ENDED SEPTEMBER 30,										
Noninterest Income										
Trust, Investment and Other Servicing Fees	\$ 667.1	\$ 626.0	\$ 529.5	\$ 485.9	\$ —	\$ —	\$ —	\$ —	\$ 1,196.6	\$ 1,111.9
Foreign Exchange Trading Income (Loss)	59.5	54.3	(5.4)	(2.5)	—	—	—	—	54.1	51.8
Other Noninterest Income (Loss)	67.3	66.1	35.7	38.1	52.5	2.4	—	—	155.5	106.6
Total Noninterest Income (Loss)	793.9	746.4	559.8	521.5	52.5	2.4	—	—	1,406.2	1,270.3
Net Interest Income	321.4	281.2	248.0	188.2	—	—	(7.1)	(13.2)	562.3	456.2
Revenue	1,115.3	1,027.6	807.8	709.7	52.5	2.4	(7.1)	(13.2)	1,968.5	1,726.5
Provision for Credit Losses	(0.6)	3.1	12.4	10.9	(3.8)	—	—	—	8.0	14.0
Noninterest Expense	860.7	809.3	491.3	456.9	7.4	12.0	—	—	1,359.4	1,278.2
Income before Income Taxes	255.2	215.2	304.1	241.9	48.9	(9.6)	(7.1)	(13.2)	601.1	434.3
Provision for Income Taxes	57.1	54.3	75.1	67.7	11.1	(2.3)	(7.1)	(13.2)	136.2	106.5
Net Income	\$ 198.1	\$ 160.9	\$ 229.0	\$ 174.2	\$ 37.8	\$ (7.3)	\$ —	\$ —	\$ 464.9	\$ 327.8
Percentage of Consolidated Net Income	43 %	49 %	49 %	53 %	8 %	(2)%	N/A	N/A	100 %	100 %
Average Assets	\$108,108.0	\$108,656.7	\$38,734.9	\$31,544.9	\$ —	\$ —	N/A	N/A	\$146,842.9	\$140,201.6

⁽¹⁾ Includes the current quarter gain related to the sale of an equity investment.

(In Millions)	ASSET SERVICING		WEALTH MANAGEMENT		OTHER ⁽¹⁾		RECONCILING ITEMS		TOTAL CONSOLIDATED	
	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023
NINE MONTHS ENDED SEPTEMBER 30,										
Noninterest Income										
Trust, Investment and Other Servicing Fees	\$ 1,957.3	\$ 1,850.2	\$ 1,548.3	\$ 1,421.6	\$ —	\$ —	\$ —	\$ —	\$ 3,505.6	\$ 3,271.8
Foreign Exchange Trading Income (Loss)	181.6	161.2	(12.1)	(6.3)	—	—	—	—	169.5	154.9
Other Noninterest Income (Loss)	199.2	199.0	105.3	112.8	737.9	(9.2)	—	—	1,042.4	302.6
Total Noninterest Income (Loss)	2,338.1	2,210.4	1,641.5	1,528.1	737.9	(9.2)	—	—	4,717.5	3,729.3
Net Interest Income	900.5	902.6	734.1	635.8	—	—	(21.3)	(39.5)	1,613.3	1,498.9
Revenue	3,238.6	3,113.0	2,375.6	2,163.9	737.9	(9.2)	(21.3)	(39.5)	6,330.8	5,228.2
Provision for Credit Losses	(1.9)	(3.3)	15.7	16.8	(6.3)	—	—	—	7.5	13.5
Noninterest Expense	2,634.0	2,459.7	1,504.9	1,402.4	119.1	33.6	—	—	4,258.0	3,895.7
Income before Income Taxes	606.5	656.6	855.0	744.7	625.1	(42.8)	(21.3)	(39.5)	2,065.3	1,319.0
Provision for Income Taxes	146.1	167.4	223.0	207.5	141.8	(10.6)	(21.3)	(39.5)	489.6	324.8
Net Income	\$ 460.4	\$ 489.2	\$ 632.0	\$ 537.2	\$ 483.3	\$ (32.2)	\$ —	\$ —	\$ 1,575.7	\$ 994.2
Percentage of Consolidated Net Income	29 %	49 %	40 %	54 %	31 %	(3)%	N/A	N/A	100 %	100 %
Average Assets	\$108,025.6	\$110,380.4	\$38,629.2	\$34,311.2	\$ —	\$ —	N/A	N/A	\$146,654.8	\$144,691.6

⁽¹⁾ Includes the current quarter gain related to the sale of an equity investment. Includes the gain related to the net impact from the Visa transactions in the second quarter of 2024, refer to Note 20—Commitments and Contingent Liabilities for further information.

Note: Segment results are stated on an FTE basis. The FTE adjustments are eliminated in the reconciling items column with the Corporation's total consolidated financial results stated on a GAAP basis. The adjustment to an FTE basis has no impact on Net Income.

Note 10 – 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.

As of September 30, 2024, 5,000 shares of Series D Non-Cumulative Perpetual Preferred Stock (Series D Preferred Stock) and 16,000 shares of Series E Non-Cumulative Perpetual Preferred Stock (Series E Preferred Stock) were outstanding.

Series D Preferred Stock. As of September 30, 2024, the Corporation had issued and outstanding 500,000 depository shares, each representing a 1/100th ownership interest in a share of Series D Preferred Stock, issued in August 2016. Equity related to Series D Preferred Stock as of both September 30, 2024 and December 31, 2023 was \$493.5 million. Shares of the Series D Preferred Stock have no par value and a liquidation preference of \$100,000 (equivalent to \$1,000 per depository share).

Dividends on the Series D Preferred Stock, which are not mandatory, accrue and are 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 the three-month CME Term Secured Overnight Finance Rate (SOFR), as administered by CME Group Benchmark Administration, Ltd., plus a statutory spread adjustment of 0.26161% (as set forth in the final rule to implement the LIBOR Act) plus 3.202% from and including October 1, 2026. Fixed rate dividends are payable in arrears on the first day of April and October of each year, through and including October 1, 2026, and floating rate dividends will be payable in arrears on the first day of January, April, July and October of each year, commencing on January 1, 2027. On July 16, 2024, the Corporation declared a cash dividend of \$2,300.00 per share of Series D Preferred Stock payable on October 1, 2024, to stockholders of record as of September 15, 2024.

Series E Preferred Stock. As of September 30, 2024, the Corporation had issued and outstanding 16 million depository shares, each representing 1/1,000th ownership interest in a share of Series E Preferred Stock, issued in November 2019. Equity related to Series E Preferred Stock as of September 30, 2024 and December 31, 2023 was \$391.4 million. Shares of the Series E Preferred Stock have no par value and a liquidation preference of \$25,000 (equivalent to \$25 per depository share).

Dividends on the Series E Preferred Stock, which are not mandatory, 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 4.70%. On July 16, 2024, the Corporation declared a cash dividend of \$293.75 per share of Series E Preferred Stock payable on October 1, 2024, to stockholders of record as of September 15, 2024.

Common Stock. The Corporation's current stock repurchase authorization to repurchase up to 25 million shares was approved by the Board of Directors in October 2021. Shares are repurchased by the Corporation to, among other things, manage the Corporation's capital levels. Repurchased shares are used for general purposes, including the issuance of shares under stock option and other incentive plans. The repurchase authorization approved by the Board of Directors has no expiration date. For the three and nine months ended September 30, 2024, the Corporation repurchased 3,463,546 and 8,112,288 shares of common stock, respectively, at a total cost of \$301.4 million (\$87.01 average price per share) and \$684.2 million (\$84.34 average price per share), respectively, including 15,629 and 398,646 shares, withheld to satisfy tax withholding obligations related to share-based compensation, respectively. For the three and nine months ended September 30, 2023, the Corporation repurchased 14,738 and 2,426,793 shares of common stock, respectively, at a total cost of \$1.1 million (\$77.39 average price per share) and \$201.3 million (\$82.95 average price per share), respectively, including 14,738 and 356,145 shares withheld to satisfy tax withholding obligations related to share-based compensation, respectively.

Notes to Consolidated Financial Statements (unaudited) (continued)

Note 11 – Accumulated Other Comprehensive Income (Loss)

The following tables summarize the components of Accumulated Other Comprehensive Income (Loss) (AOCI) at September 30, 2024 and 2023, and changes during the three and nine months then ended.

TABLE 62: SUMMARY OF CHANGES IN ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

THREE MONTHS ENDED SEPTEMBER 30, 2024						
(In Millions)	NET UNREALIZED GAINS (LOSSES) ON AVAILABLE FOR SALE DEBT SECURITIES	NET UNREALIZED GAINS (LOSSES) ON CASH FLOW HEDGES	NET FOREIGN CURRENCY ADJUSTMENT	NET PENSION AND OTHER POSTRETIREMENT BENEFIT ADJUSTMENTS		TOTAL
Balance at June 30, 2024	\$ (667.1)	\$ —	\$ 215.2	\$ (413.1)		(865.0)
Net Change	63.9	0.3	18.9	2.4		85.5
Balance at September 30, 2024	\$ (603.2)	\$ 0.3	\$ 234.1	\$ (410.7)		(779.5)

NINE MONTHS ENDED SEPTEMBER 30, 2024						
(In Millions)	NET UNREALIZED GAINS (LOSSES) ON AVAILABLE FOR SALE DEBT SECURITIES	NET UNREALIZED GAINS (LOSSES) ON CASH FLOW HEDGES	NET FOREIGN CURRENCY ADJUSTMENT	NET PENSION AND OTHER POSTRETIREMENT BENEFIT ADJUSTMENTS		TOTAL
Balance at December 31, 2023	\$ (923.9)	\$ 0.8	\$ 203.6	\$ (418.4)		(1,137.9)
Net Change	320.7	(0.5)	30.5	7.7		358.4
Balance at September 30, 2024	\$ (603.2)	\$ 0.3	\$ 234.1	\$ (410.7)		(779.5)

THREE MONTHS ENDED SEPTEMBER 30, 2023						
(In Millions)	NET UNREALIZED GAINS (LOSSES) ON AVAILABLE FOR SALE DEBT SECURITIES	NET UNREALIZED GAINS (LOSSES) ON CASH FLOW HEDGES	NET FOREIGN CURRENCY ADJUSTMENT	NET PENSION AND OTHER POSTRETIREMENT BENEFIT ADJUSTMENTS		TOTAL
Balance at June 30, 2023	\$ (1,229.4)	\$ 0.5	\$ 189.2	\$ (366.2)		(1,405.9)
Net Change	32.3	(0.4)	9.6	1.0		42.5
Balance at September 30, 2023	\$ (1,197.1)	\$ 0.1	\$ 198.8	\$ (365.2)		(1,363.4)

NINE MONTHS ENDED SEPTEMBER 30, 2023						
(In Millions)	NET UNREALIZED GAINS (LOSSES) ON AVAILABLE FOR SALE DEBT SECURITIES	NET UNREALIZED GAINS (LOSSES) ON CASH FLOW HEDGES	NET FOREIGN CURRENCY ADJUSTMENT	NET PENSION AND OTHER POSTRETIREMENT BENEFIT ADJUSTMENTS		TOTAL
Balance at December 31, 2022	\$ (1,367.6)	\$ 1.2	\$ 164.6	\$ (367.4)		(1,569.2)
Net Change	170.5	(1.1)	34.2	2.2		205.8
Balance at September 30, 2023	\$ (1,197.1)	\$ 0.1	\$ 198.8	\$ (365.2)		(1,363.4)

Notes to Consolidated Financial Statements (unaudited) (continued)
TABLE 63: DETAILS OF CHANGES IN ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

THREE MONTHS ENDED SEPTEMBER 30, (In Millions)	2024			2023		
	PRE-TAX	TAX	AFTER TAX	PRE-TAX	TAX	AFTER TAX
Unrealized Gains (Losses) on Available for Sale Debt Securities						
Unrealized Gains (Losses) on Available for Sale Debt Securities	\$ 63.7	\$ (18.6)	\$ 45.1	\$ 18.0	\$ (5.6)	\$ 12.4
Reclassification Adjustments for (Gains) Losses Included in Net Income:						
Interest Income on Debt Securities ⁽¹⁾	24.9	(6.1)	18.8	26.7	(6.8)	19.9
Net (Gains) Losses on Debt Securities ⁽²⁾	—	—	—	—	—	—
Net Change	\$ 88.6	\$ (24.7)	\$ 63.9	\$ 44.7	\$ (12.4)	\$ 32.3
Unrealized Gains (Losses) on Cash Flow Hedges						
Foreign Exchange Contracts	\$ 1.0	\$ (0.2)	\$ 0.8	\$ 14.3	\$ (3.6)	\$ 10.7
Reclassification Adjustment for (Gains) Losses Included in Net Income ⁽³⁾	(0.6)	0.1	(0.5)	(14.9)	3.8	(11.1)
Net Change	\$ 0.4	\$ (0.1)	\$ 0.3	\$ (0.6)	\$ 0.2	\$ (0.4)
Foreign Currency Adjustments						
Foreign Currency Translation Adjustments	\$ 122.9	\$ (2.4)	\$ 120.5	\$ (89.2)	\$ 1.7	\$ (87.5)
Long-Term Intra-Entity Foreign Currency Transaction Gains (Losses)	1.0	(0.3)	0.7	(0.2)	0.1	(0.1)
Net Investment Hedge Gains (Losses)	(135.6)	33.3	(102.3)	129.9	(32.7)	97.2
Net Change	\$ (11.7)	\$ 30.6	\$ 18.9	\$ 40.5	\$ (30.9)	\$ 9.6
Pension and Other Postretirement Benefit Adjustments						
Net Actuarial Gains (Losses)	\$ (0.1)	\$ —	\$ (0.1)	\$ (0.2)	\$ —	\$ (0.2)
Reclassification Adjustment for (Gains) Losses Included in Net Income ⁽⁴⁾						
Amortization of Net Actuarial Loss	3.2	(0.7)	2.5	1.6	(0.4)	1.2
Net Change	\$ 3.1	\$ (0.7)	\$ 2.4	\$ 1.4	\$ (0.4)	\$ 1.0
Total Net Change	\$ 80.4	\$ 5.1	\$ 85.5	\$ 86.0	\$ (43.5)	\$ 42.5

NINE MONTHS ENDED SEPTEMBER 30, (In Millions)	2024			2023		
	PRE-TAX	TAX	AFTER TAX	PRE-TAX	TAX	AFTER TAX
Unrealized Gains (Losses) on Available for Sale Debt Securities						
Unrealized Gains (Losses) on Available for Sale Debt Securities	\$ 176.9	\$ (55.1)	\$ 121.8	\$ 158.6	\$ (42.0)	\$ 116.6
Reclassification Adjustments for (Gains) Losses Included in Net Income:						
Interest Income on Debt Securities ⁽¹⁾	76.5	(19.0)	57.5	79.0	(19.9)	59.1
Net (Gains) Losses on Debt Securities ⁽²⁾	189.3	(47.9)	141.4	(6.9)	1.7	(5.2)
Net Change	\$ 442.7	\$ (122.0)	\$ 320.7	\$ 230.7	\$ (60.2)	\$ 170.5
Unrealized Gains (Losses) on Cash Flow Hedges						
Foreign Exchange Contracts	\$ 6.4	\$ (1.5)	\$ 4.9	\$ 16.2	\$ (4.1)	\$ 12.1
Reclassification Adjustment for (Gains) Losses Included in Net Income ⁽³⁾	(7.1)	1.7	(5.4)	(17.7)	4.5	(13.2)
Net Change	\$ (0.7)	\$ 0.2	\$ (0.5)	\$ (1.5)	\$ 0.4	\$ (1.1)
Foreign Currency Adjustments						
Foreign Currency Translation Adjustments	\$ 52.5	\$ (1.2)	\$ 51.3	\$ (15.7)	\$ 1.2	\$ (14.5)
Long-Term Intra-Entity Foreign Currency Transaction Gains (Losses)	0.2	(0.1)	0.1	(1.8)	0.5	(1.3)
Net Investment Hedge Gains (Losses)	(36.3)	15.4	(20.9)	66.8	(16.8)	50.0
Net Change	\$ 16.4	\$ 14.1	\$ 30.5	\$ 49.3	\$ (15.1)	\$ 34.2
Pension and Other Postretirement Benefit Adjustments						
Net Actuarial Gains (Losses)	\$ 0.9	\$ (0.5)	\$ 0.4	\$ (1.5)	\$ 0.1	\$ (1.4)
Reclassification Adjustment for (Gains) Losses Included in Net Income ⁽⁴⁾						
Amortization of Net Actuarial Loss	9.6	(2.3)	7.3	4.8	(1.2)	3.6
Net Change	\$ 10.5	\$ (2.8)	\$ 7.7	\$ 3.3	\$ (1.1)	\$ 2.2
Total Net Change	\$ 468.9	\$ (110.5)	\$ 358.4	\$ 281.8	\$ (76.0)	\$ 205.8

⁽¹⁾ The before-tax reclassification adjustment is related to the unrealized gains (losses) amortization on AFS debt securities that were transferred to HTM debt securities during the second quarter of 2021 and third quarter of 2022.

⁽²⁾ The net gains (losses) on AFS debt securities before-tax reclassification adjustment is recorded in Investment Security Gains (Losses), net on the consolidated statements of income.

⁽³⁾ See Note 21—Derivative Financial Instruments for the location of the reclassification adjustment related to cash flow hedges.

⁽⁴⁾ The pension and other postretirement benefit before-tax reclassification adjustment is recorded in Employee Benefits expense on the consolidated statements of income.

Notes to Consolidated Financial Statements (unaudited) (continued)

Note 12 – Net Income Per Common Share

The computations of net income per common share are presented in the following table.

TABLE 64: NET INCOME PER COMMON SHARE

(\$ In Millions Except Per Common Share Information)	THREE MONTHS ENDED SEPTEMBER 30,		NINE MONTHS ENDED SEPTEMBER 30,	
	2024	2023	2024	2023
Basic Net Income Per Common Share				
Average Number of Common Shares Outstanding	199,937,543	207,021,554	202,614,386	207,611,420
Net Income	\$ 464.9	\$ 327.8	\$ 1,575.7	\$ 994.2
Less: Dividends on Preferred Stock	16.2	16.2	37.1	37.1
Net Income Applicable to Common Stock	448.7	311.6	1,538.6	957.1
Less: Earnings Allocated to Participating Securities	3.6	3.1	13.2	9.7
Earnings Allocated to Common Shares Outstanding	445.1	308.5	1,525.4	947.4
Basic Net Income Per Common Share	\$ 2.23	\$ 1.49	\$ 7.53	\$ 4.56
Diluted Net Income Per Common Share				
Average Number of Common Shares Outstanding	199,937,543	207,021,554	202,614,386	207,611,420
Plus: Dilutive Effect of Share-based Compensation	611,520	231,438	517,014	316,300
Average Common and Potential Common Shares	200,549,063	207,252,992	203,131,400	207,927,720
Earnings Allocated to Common and Potential Common Shares	\$ 445.1	\$ 308.5	\$ 1,525.4	\$ 947.3
Diluted Net Income Per Common Share	2.22	1.49	7.51	4.56

Note: For the three and nine months ended September 30, 2024, there were de minimis and 0.2 million common stock equivalents, respectively, excluded from the computation of diluted net income per common share because their inclusion would have been antidilutive. For the three and nine months ended September 30, 2023, there were de minimis and 0.1 million common stock equivalents, respectively, excluded in the computation of diluted net income per share.

Note 13 – Revenue from Contracts with Clients

Trust, Investment, and Other Servicing Fees. Custody and Fund Administration income is comprised of revenues received from our core asset servicing business for providing custody, fund administration, and middle-office-related services, primarily to Asset Servicing clients. Investment Management and Advisory income contains revenue received from providing asset management and related services to Wealth Management and Asset Servicing clients and to Northern Trust sponsored funds. Securities Lending income represents revenues generated from securities lending arrangements that Northern Trust enters into as agent, mainly with Asset Servicing clients. Other income largely consists of revenues received from providing employee benefit, investment risk and analytic and other services to Asset Servicing and Wealth Management clients.

Other Noninterest Income. Treasury Management income represents revenues received from providing cash and liquidity management services to Asset Servicing and Wealth Management clients. The portion of Security Commissions and Trading Income that relates to revenue from contracts with clients is primarily comprised of commissions earned from providing securities brokerage services to Wealth Management and Asset Servicing clients. The portion of Other Operating Income that relates to revenue from contracts with clients is mainly comprised of service fees for banking-related services provided to Wealth Management and Asset Servicing clients.

Performance Obligations. Clients are typically charged monthly or quarterly in arrears based on the fee arrangement agreed to with each client; payment terms will vary depending on the client and services offered.

Substantially all revenues generated from contracts with clients for asset servicing, asset management, securities lending, treasury management and banking-related services are recognized on an accrual basis, over the period in which services are provided. The nature of Northern Trust's performance obligations is to provide a series of distinct services in which the customer simultaneously receives and consumes the benefits of the promised services as they are performed. Fee arrangements are mainly comprised of variable amounts based on market value of client assets managed and serviced, transaction volumes, number of accounts, and securities lending volume and spreads. Revenue is recognized using the output method in an amount that reflects the consideration to which Northern Trust expects to be entitled in exchange for providing each month or quarter of service. For contracts with multiple performance obligations, revenue is allocated to each performance obligation based on the price agreed to with the client, representing its relative standalone selling price.

Security brokerage revenue is primarily represented by securities commissions received in exchange for providing trade execution related services. Control is transferred at a point in time, on the trade date of the transaction, and fees are typically variable based on transaction volumes and security types.

Northern Trust's contracts with its clients are typically open-ended arrangements and are therefore considered to have an original duration of less than one year. Northern Trust has elected the practical expedient to not disclose the value of remaining performance obligations for contracts with an original expected duration of one year or less.

Notes to Consolidated Financial Statements (unaudited) (continued)

The following table presents revenues disaggregated by major revenue source.

TABLE 65: REVENUE DISAGGREGATION

(In Millions)	THREE MONTHS ENDED SEPTEMBER 30,		NINE MONTHS ENDED SEPTEMBER 30,	
	2024	2023	2024	2023
Noninterest Income				
Trust, Investment and Other Servicing Fees				
Custody and Fund Administration	\$ 482.5	\$ 459.0	\$ 1,427.1	\$ 1,358.7
Investment Management and Advisory	634.8	574.1	1,838.3	1,673.4
Securities Lending	17.7	20.7	53.2	61.3
Other	61.6	58.1	187.0	178.4
Total Trust, Investment and Other Servicing Fees	\$ 1,196.6	\$ 1,111.9	\$ 3,505.6	\$ 3,271.8
Other Noninterest Income				
Foreign Exchange Trading Income	\$ 54.1	\$ 51.8	\$ 169.5	\$ 154.9
Treasury Management Fees	8.2	7.5	26.5	23.8
Security Commissions and Trading Income	35.5	30.9	107.7	101.7
Other Operating Income	111.8	68.2	1,097.5	170.2
Investment Security Gains (Losses), net	—	—	(189.3)	6.9
Total Other Noninterest Income	\$ 209.6	\$ 158.4	\$ 1,211.9	\$ 457.5
Total Noninterest Income	\$ 1,406.2	\$ 1,270.3	\$ 4,717.5	\$ 3,729.3

On the consolidated statements of income, Trust, Investment and Other Servicing Fees and Treasury Management Fees represent revenue from contracts with clients. For the three months ended September 30, 2024, revenue from contracts with clients also includes \$31.0 million of the \$35.5 million total Security Commissions and Trading Income and \$9.7 million of the \$111.8 million total Other Operating Income. For the nine months ended September 30, 2024, revenue from contracts with clients also includes \$95.7 million of the \$107.7 million total Security Commissions and Trading Income and \$29.0 million of the \$1,097.5 million total Other Operating Income.

For the three months ended September 30, 2023, revenue from contracts with clients also includes \$27.4 million of the \$30.9 million total Security Commissions and Trading Income and \$11.2 million of the \$68.2 million total Other Operating Income. For the nine months ended September 30, 2023, revenue from contracts with clients also includes \$86.3 million of the \$101.7 million total Security Commissions and Trading Income and \$30.5 million of the \$170.2 million total Other Operating Income.

Receivables Balances. The table below represents receivables balances from contracts with clients, which are included in Other Assets on the consolidated balance sheets, at September 30, 2024 and December 31, 2023.

TABLE 66: CLIENT RECEIVABLES

(In Millions)	SEPTEMBER 30, 2024	DECEMBER 31, 2023
Trust Fees Receivable, net ⁽¹⁾	\$ 973.6	\$ 863.5
Other	57.1	64.9
Total Client Receivables	\$ 1,030.7	\$ 928.4

⁽¹⁾ Trust Fees Receivable is net of a \$13.5 million and \$15.9 million fee receivable allowance as of September 30, 2024 and December 31, 2023, respectively.

Notes to Consolidated Financial Statements (unaudited) (continued)

Note 14 – Net Interest Income

The components of Net Interest Income were as follows.

TABLE 67: NET INTEREST INCOME

(In Millions)	THREE MONTHS ENDED SEPTEMBER 30,		NINE MONTHS ENDED SEPTEMBER 30,	
	2024	2023	2024	2023
Interest Income				
Federal Reserve and Other Central Bank Deposits	\$ 451.7	\$ 352.1	\$ 1,369.0	\$ 1,128.0
Interest-Bearing Due from and Deposits with Banks ⁽¹⁾	28.5	34.9	94.5	95.2
Federal Funds Sold	—	—	—	0.3
Securities Purchased under Agreements to Resell	890.8	463.9	2,578.2	874.1
Securities — Taxable	486.3	402.4	1,409.0	1,106.5
— Nontaxable ⁽²⁾	0.2	0.3	0.8	1.0
Loans	644.5	664.2	1,946.4	1,881.6
Other Interest-Earning Assets ⁽³⁾	28.2	17.2	84.4	38.7
Total Interest Income	\$ 2,530.2	\$ 1,935.0	\$ 7,482.3	\$ 5,125.4
Interest Expense				
Deposits	\$ 873.5	\$ 716.6	\$ 2,653.5	\$ 1,914.7
Federal Funds Purchased	29.6	77.5	101.9	205.2
Securities Sold Under Agreements to Repurchase	869.7	454.0	2,535.1	843.5
Other Borrowings	94.8	154.8	278.7	446.3
Senior Notes	44.2	44.1	132.4	125.4
Long-Term Debt	56.1	31.8	167.4	91.4
Total Interest Expense	\$ 1,967.9	\$ 1,478.8	\$ 5,869.0	\$ 3,626.5
Net Interest Income	\$ 562.3	\$ 456.2	\$ 1,613.3	\$ 1,498.9

⁽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⁾ Non-taxable Securities represent securities that are exempt from U.S. federal income taxes.

⁽³⁾ Other Interest-Earning Assets include certain community development investments, collateral deposits with certain securities depositories and clearing houses, Federal Home Loan Bank and Federal Reserve stock, and money market investments which are classified in Other Assets on the consolidated balance sheets.

Note 15 – Other Operating Income

The components of Other Operating Income were as follows.

TABLE 68: OTHER OPERATING INCOME

(In Millions)	THREE MONTHS ENDED SEPTEMBER 30,		NINE MONTHS ENDED SEPTEMBER 30,	
	2024	2023	2024	2023
Loan Service Fees	\$ 14.0	\$ 21.2	\$ 43.4	\$ 61.3
Banking Service Fees	14.2	15.0	40.8	40.8
Bank Owned Life Insurance	18.4	17.3	60.4	51.0
Other Income ⁽¹⁾⁽²⁾	65.2	14.7	952.9	17.1
Total Other Operating Income	\$ 111.8	\$ 68.2	\$ 1,097.5	\$ 170.2

⁽¹⁾ Other Income for three months ended September 30, 2024 includes a \$68.1 million pre-tax gain related to the sale of an equity investment.

⁽²⁾ Other Income for the three and nine months ended September 30, 2024 includes the mark-to-market loss on derivative swap activity primarily related to the sale of certain Visa Class B common shares. For the nine months ended September 30, 2024, Other Income includes the mark-to-market gain related to Visa Class C common shares. Refer to Note 20 — Commitments and Contingent Liabilities for further information.

Notes to Consolidated Financial Statements (unaudited) (continued)

Note 16 – Other Operating Expense

The components of Other Operating Expense were as follows.

TABLE 69: OTHER OPERATING EXPENSE

In Millions)	THREE MONTHS ENDED SEPTEMBER 30,		NINE MONTHS ENDED SEPTEMBER 30,	
	2024	2023	2024	2023
Business Promotion	\$ 19.1	\$ 16.2	\$ 56.6	\$ 53.5
Staff Related	12.4	11.0	34.8	27.7
FDIC Insurance Premiums ⁽¹⁾	7.1	8.3	35.6	21.1
Charitable Contributions ⁽²⁾	3.3	3.8	79.3	11.3
Other Expenses	44.2	59.2	155.5	182.5
Total Other Operating Expense	\$ 86.1	\$ 98.5	\$ 361.8	\$ 296.1

⁽¹⁾ FDIC Insurance Premiums for the nine months ended September 30, 2024 includes \$14.7 million related to the FDIC Insurance Premium Special Assessment. Refer to Note 20—Commitments and Contingent Liabilities for further information.

⁽²⁾ Charitable Contributions includes a \$70 million charitable contribution to the Northern Trust Foundation for the nine months ended September 30, 2024.

Note 17 – Pension

The following table sets forth the net periodic pension expense for Northern Trust's U.S. Qualified Plan, Non-U.S. Pension Plans, and U.S. Non-Qualified Plan for the three and nine months ended September 30, 2024 and 2023.

TABLE 70: NET PERIODIC PENSION EXPENSE (BENEFIT)

U.S. QUALIFIED PLAN (In Millions)	THREE MONTHS ENDED SEPTEMBER 30,		NINE MONTHS ENDED SEPTEMBER 30,	
	2024	2023	2024	2023
Service Cost	\$ 13.4	\$ 11.5	\$ 40.2	\$ 34.5
Interest Cost	13.9	13.5	41.7	40.5
Expected Return on Plan Assets	(28.9)	(25.3)	(86.7)	(75.9)
Amortization				
Net Actuarial Loss	1.9	0.4	5.7	1.2
Net Periodic Pension Expense	\$ 0.3	\$ 0.1	\$ 0.9	\$ 0.3
NON-U.S. PENSION PLANS				
(In Millions)	THREE MONTHS ENDED SEPTEMBER 30,		NINE MONTHS ENDED SEPTEMBER 30,	
	2024	2023	2024	2023
Service Cost	\$ 0.5	\$ 0.4	\$ 1.5	\$ 1.1
Interest Cost	1.1	1.2	3.3	3.6
Expected Return on Plan Assets	(1.6)	(1.6)	(4.8)	(4.7)
Amortization				
Net Actuarial (Gain)	—	(0.1)	—	(0.3)
Net Periodic Pension (Benefit)	\$ —	\$ (0.1)	\$ —	\$ (0.3)
U.S. NON-QUALIFIED PLAN				
(In Millions)	THREE MONTHS ENDED SEPTEMBER 30,		NINE MONTHS ENDED SEPTEMBER 30,	
	2024	2023	2024	2023
Service Cost	\$ 1.2	\$ 1.2	\$ 3.6	\$ 3.6
Interest Cost	1.2	1.3	3.6	3.9
Amortization				
Net Actuarial Loss	1.3	1.3	3.9	3.9
Net Periodic Pension Expense	\$ 3.7	\$ 3.8	\$ 11.1	\$ 11.4

The components of net periodic pension expense are recorded in Employee Benefits expense on the consolidated statements of income.

There were \$200.0 million of contributions to the U.S. Qualified Plan during the nine months ended September 30, 2024. There were no contributions to the U.S. Qualified Plan during the nine months ended September 30, 2023. There were \$8.0 million and \$16.5 million of contributions to the U.S. Non-Qualified Plan during the nine months ended September 30, 2024 and 2023, respectively.

Notes to Consolidated Financial Statements (unaudited) (continued)

Note 18 – Share-Based Compensation Plans

The Northern Trust Corporation 2017 Long-Term Incentive Plan provides for the grant of non-qualified and incentive stock options; tandem and free-standing stock appreciation rights; stock awards in the form of restricted stock, restricted stock units and other stock awards; and performance awards.

Restricted stock unit and performance stock unit grants continue to vest in accordance with the original terms of the award if the applicable employee retires after satisfying applicable age and service requirements.

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, 2024 and 2023.

TABLE 71: TOTAL COMPENSATION EXPENSE FOR SHARE-BASED PAYMENT ARRANGEMENTS

(In Millions)	THREE MONTHS ENDED SEPTEMBER 30,		NINE MONTHS ENDED SEPTEMBER 30,	
	2024	2023	2024	2023
Restricted Stock Unit Awards	\$ 13.4	\$ 14.7	\$ 78.3	\$ 80.5
Performance Stock Units	1.3	1.8	19.8	17.8
Total Share-Based Compensation Expense	14.7	16.5	98.1	98.3
Tax Benefits Recognized	\$ 3.6	\$ 4.2	\$ 24.0	\$ 24.7

Note 19 – Variable Interest Entities

Northern Trust is involved with various entities in the normal course of business that are deemed to be variable interest entities (VIEs). VIEs are defined within GAAP as entities which either (1) lack sufficient equity at risk to permit the entity to finance its activities without additional subordinated financial support, (2) have equity investors that lack attributes typical of an equity investor, such as the ability to make significant decisions through voting rights affecting the entity's operations, or the obligation to absorb expected losses or the right to receive residual returns of the entity, or (3) are structured with voting rights that are disproportionate to the equity investor's obligation to absorb losses or right to receive returns, and substantially all of the activities are conducted on behalf of the holder of the equity investment at risk with disproportionately few voting rights. Investors that finance a VIE through debt or equity interests are variable interest holders in the entity and the variable interest holder, if any, that has both the power to direct the activities that most significantly impact the entity's economic performance and, through its variable interest, the obligation to absorb losses or the right to receive returns that could potentially be significant to the entity is deemed to be the VIE's primary beneficiary and is required to consolidate the VIE.

Tax credit structures. Northern Trust holds tax-advantaged investments in unconsolidated entities that own and operate affordable housing and projects through the new markets tax credit program. These entities, which are limited partnerships and similar entities, are primarily VIEs and are designed to generate a return primarily through the realization of tax credits and other tax benefits, such as tax deductions from operating losses of the investments. Northern Trust invests as a limited partner/investor member and lacks both the power to direct the entities' most significant activities and the obligation to absorb losses or right to receive benefits that could potentially be significant to the entities. Northern Trust is not required to consolidate these entities as it does not have a controlling financial interest and thus is not the primary beneficiary.

Northern Trust's maximum exposure to loss as a result of its involvement with these entities is limited to the carrying amounts of its investments, including any undrawn commitments. 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 these entities.

Northern Trust's investments in these unconsolidated entities and related unfunded commitments are reported in Other Assets and Other Liabilities, respectively, on the consolidated balance sheets.

Notes to Consolidated Financial Statements (unaudited) (continued)
TABLE 72: SUMMARY OF UNCONSOLIDATED TAX CREDIT STRUCTURES

(In Millions)	SEPTEMBER 30, 2024		DECEMBER 31, 2023	
Investment Carrying Amount				
Affordable Housing	\$	599.3	\$	622.8
New Markets		223.9		266.3
Total Investment Carrying Amount ⁽¹⁾	\$	823.2	\$	889.1
Unfunded Commitments				
Affordable Housing	\$	173.4	\$	178.8
New Markets		—		—
Total Unfunded Commitments ⁽²⁾	\$	173.4	\$	178.8

⁽¹⁾ As of September 30, 2024 and December 31, 2023, \$795.0 million and \$857.0 million are VIEs, respectively.

⁽²⁾ As of September 30, 2024 and December 31, 2023, \$167.3 million and \$172.0 million relate to undrawn commitments on VIEs, respectively.

Upon adoption of ASU 2023-02 on January 1, 2024, Northern Trust elected to account for qualifying new markets tax credit investments under the proportional amortization method. Prior to the adoption of ASU 2023-02, Northern Trust accounted for qualifying affordable housing investments under the proportional amortization method and continues to do so subsequent to the adoption of ASU 2023-02. Under the proportional amortization method, the carrying amount of the investment is amortized in proportion to the income tax credits and other income tax benefits received in the current period as compared to the total income tax credits and income tax benefits expected to be received over the life of the investment. Income tax credits and other income tax benefits and amortization expense associated with unconsolidated tax credit structures are primarily reported in the Provision for Income Tax on the consolidated statement of income.

Northern Trust adopted ASU 2023-02 on a modified retrospective basis. As a result, amortization expense related to new markets tax credit investments is reported in the Provision for Income Tax beginning January 1, 2024. Prior to January 1, 2024, amortization expense related to new markets tax credit investments was previously reported in Other Operating Expense. Refer to Note 2—Recent Accounting Pronouncements for additional information.

TABLE 73: INCOME TAX CREDITS AND OTHER TAX BENEFITS AND AMORTIZATION EXPENSE ASSOCIATED WITH TAX CREDIT STRUCTURES

(In Millions)	THREE MONTHS ENDED SEPTEMBER 30,		NINE MONTHS ENDED SEPTEMBER 30,	
	2024	2023	2024	2023
Income Tax Credits and Other Income Tax Benefits				
Affordable Housing	\$	21.9	\$	22.5
New Markets		5.1		5.9
Total Income Tax Credits and Other Income Tax Benefits	\$	27.0	\$	28.4
Amortization Expense				
Affordable Housing	\$	19.6	\$	19.9
New Markets		4.4		4.7
Total Amortization Expense	\$	24.0	\$	24.6

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 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 ASC 810-10. Northern Trust does not have any contractual obligations 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, 2024 and December 31, 2023, Northern Trust had no seed capital investments and no unfunded commitments related to seed capital investments.

Note 20 – Commitments and Contingent Liabilities

Off-Balance Sheet Financial Instruments, Guarantees and Other Commitments. 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. The contractual amounts of these instruments represent the maximum potential credit exposure should the instrument be fully drawn upon and the client default. To control the credit risk associated with entering into commitments and issuing letters of credit, Northern Trust subjects such activities to the same credit quality and monitoring controls as its lending activities. Northern Trust does not believe the total contractual amount of these instruments to be representative of its future credit exposure or funding requirements.

The following table provides details of Northern Trust's off-balance sheet financial instruments as of September 30, 2024 and December 31, 2023.

TABLE 74: SUMMARY OF OFF-BALANCE SHEET FINANCIAL INSTRUMENTS

(In Millions)	SEPTEMBER 30, 2024			DECEMBER 31, 2023		
	ONE YEAR AND LESS	OVER ONE YEAR	TOTAL	ONE YEAR AND LESS	OVER ONE YEAR	TOTAL
Undrawn Commitments ⁽¹⁾	\$ 11,202.5	\$ 18,982.6	\$ 30,185.1	\$ 11,849.5	\$ 18,909.6	\$ 30,759.1
Standby Letters of Credit and Financial Guarantees ⁽²⁾⁽³⁾	113,405.2	493.7	113,898.9	85,752.0	639.0	86,391.0
Commercial Letters of Credit	34.8	0.3	35.1	29.2	1.3	30.5
Securities Lent with Indemnification	146,058.1	—	146,058.1	140,539.1	—	140,539.1
Unsettled Reverse Repurchase Agreements	11,544.1	—	11,544.1	27,667.7	—	27,667.7
Total Off-Balance Sheet Financial Instruments	\$ 282,244.7	\$ 19,476.6	\$ 301,721.3	\$ 265,837.5	\$ 19,549.9	\$ 285,387.4

⁽¹⁾ These amounts exclude \$203.1 million and \$222.2 million of commitments participated to others at September 30, 2024 and December 31, 2023, respectively.

⁽²⁾ These amounts include \$101.8 million and \$39.1 million of standby letters of credit secured by cash deposits or participated to others as of September 30, 2024 and December 31, 2023, respectively.

⁽³⁾ These amounts include a \$112.0 billion and \$84.6 billion guarantee to the Fixed Income Clearing Corporation (FICC) under the sponsored member program, without taking into consideration the related collateral, as of September 30, 2024 and December 31, 2023, respectively.

Undrawn Commitments 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.

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. Since the vast majority of the standby letters of credit are never drawn, the total standby letters of credit amount does not necessarily represent future loans or liquidity requirements.

Financial Guarantees are issued by Northern Trust to guarantee the performance of a client to a third party under certain arrangements.

Commercial Letters of Credit are instruments issued by Northern Trust on behalf of its clients that authorize a third party (the beneficiary) to draw drafts up to a stipulated amount under the specified terms and conditions of the agreement and other similar instruments. Commercial letters of credit are issued primarily to facilitate international trade.

Securities Lent with Indemnification involves Northern Trust lending securities owned by clients to borrowers who are reviewed and approved by the Northern Trust Capital Markets Credit Committee, as part of its securities custody activities and at the direction of its clients. 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, 2024 and December 31, 2023 subject to indemnification was \$146.1 billion and \$140.5 billion, respectively. Because of the credit quality of the borrowers and the requirement to fully collateralize 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, 2024 or December 31, 2023, related to these indemnifications.

Unsettled Repurchase and Reverse Repurchase Agreements. Northern Trust enters into repurchase agreements and reverse repurchase agreements which may settle at a future date. In repurchase agreements, Northern Trust receives cash from and provides securities as collateral to a counterparty. In reverse repurchase agreements, Northern Trust advances cash to and receives securities as collateral from a counterparty. These transactions are recorded on the consolidated balance sheets on the

Notes to Consolidated Financial Statements (unaudited) (continued)

settlement date. As of September 30, 2024 and December 31, 2023, there were \$11.5 billion and \$27.7 billion unsettled reverse repurchase agreements, respectively, and no unsettled repurchase agreements.

Sponsored Member Program. Northern Trust is an approved Government Securities Division (GSD) netting and sponsoring member in the FICC sponsored member program, through which Northern Trust submits eligible repurchase and reverse repurchase transactions in U.S. government securities between Northern Trust and its sponsored member clients for novation and clearing. Northern Trust may sponsor clients to clear their eligible repurchase transactions with the FICC. As a sponsoring member, Northern Trust guarantees to the FICC the prompt and full payment and performance of its sponsored member clients' respective obligations under the FICC GSD's rules. To mitigate Northern Trust's credit exposure under this guarantee, Northern Trust obtains a security interest in its sponsored member clients' collateral. See Note 23—Offsetting of Assets and Liabilities for additional information on Northern Trust's repurchase and reverse repurchase agreements.

Clearing and Settlement Organizations. The Bank is a participating member of various cash, securities and foreign exchange clearing and settlement organizations. It participates in these organizations on behalf of its clients and on its own behalf as a result of its own activities. A wide variety of cash and securities transactions are settled through these organizations, including those involving U.S. Treasuries, obligations of states and political subdivisions, asset-backed securities, commercial paper, dollar placements, and securities issued by the Government National Mortgage Association.

Certain of these industry clearing and settlement exchanges require their members to guarantee their obligations and liabilities and/or to provide liquidity support in the event other members do not honor their obligations as stipulated in each clearing organization's membership agreement. Exposure related to these agreements varies, primarily as a result of fluctuations in the volume of transactions cleared through the organizations. At September 30, 2024 and December 31, 2023, Northern Trust has not recorded any material liabilities under these arrangements as Northern Trust believes the likelihood that a clearing or settlement exchange (of which Northern Trust is a member) would become insolvent is remote. Controls related to these clearing transactions are closely monitored by management to protect the assets of Northern Trust and its clients.

FDIC Special Assessment. In November 2023, the Federal Deposit Insurance Corporation (FDIC) issued a final rule to implement a special assessment to recoup losses to the deposit insurance fund associated with bank failures in the first half of 2023. In conjunction with the special assessment, \$84.6 million was recognized as an accrued liability and related expense in the fourth quarter of 2023. During the first half of 2024, the FDIC published revised estimated losses as well as estimated recoveries from the related bank failures. As a result, Northern Trust recognized an additional accrued liability and related expense of \$14.7 million for the nine months ended September 30, 2024, recorded to Other Operating Expense. As of September 30, 2024, Northern Trust estimates its total liability related to the special assessment to be \$99.3 million.

Legal Proceedings. In the normal course of business, the Corporation and its subsidiaries are routinely defendants in or parties to pending and threatened legal actions, and are subject to regulatory examinations, information-gathering requests, investigations, and proceedings, both formal and informal. In certain legal actions, claims for substantial monetary damages are asserted. In regulatory matters, claims for disgorgement, restitution, penalties and/or other remedial actions or sanctions may be sought.

Based on current knowledge, after consultation with legal counsel and after taking into account current accruals, management does not believe that losses, fines or penalties, if any, arising from pending litigation or threatened legal actions or regulatory matters either individually or in the aggregate, after giving effect to applicable reserves and insurance coverage will have a material adverse effect on the consolidated financial position or liquidity of 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."

The outcome of litigation and regulatory matters is inherently difficult to predict and/or the range of loss often cannot be reasonably estimated, particularly for 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.

Notes to Consolidated Financial Statements (unaudited) (continued)

For a limited number of 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, 2024, the Corporation has estimated the range of reasonably possible loss for these matters to be from zero to approximately \$20 million in the aggregate. The Corporation's estimate with respect to the aggregate range 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 may vary significantly from the current estimate.

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

In 2015, Northern Trust Fiduciary Services (Guernsey) Limited (NTFS), an indirect subsidiary of the Corporation, was charged by a French investigating magistrate judge with complicity in estate tax fraud in connection with the administration of two trusts for which it serves as trustee. Charges also were brought against a number of other persons and entities related to this matter. In 2017, a French court found no estate tax fraud had occurred and NTFS and all other persons and entities charged were acquitted. The Public Prosecutor's Office of France appealed the court decision and in June 2018 a French appellate court issued its opinion on the matter, acquitting all persons and entities charged, including NTFS. In January 2021, the Cour de Cassation, the highest court in France, reversed the June 2018 appellate court ruling, requiring a re-trial at the appellate court level. This re-trial concluded in October 2023. On March 5, 2024 the appellate court rendered a judgment against all defendants, including NTFS. NTFS was ordered to pay a fine of €187,500 in conjunction with the judgment. In addition, the court ordered that certain of those convicted in relation to tax fraud or aiding and abetting tax fraud, including NTFS, are jointly and severally liable for any allegedly unpaid estate taxes owing, plus penalties and interest. NTFS provided no tax advice and was not involved in the preparation or filing of the challenged estate tax filings in this case. Further, NTFS believes it acted in accordance with all applicable laws and fully complied with its fiduciary duties. Accordingly, NTFS filed an appeal of the judgment on March 5, 2024. Under applicable law, upon the filing by NTFS of its appeal, the judgment, as well as its effects (including the fine and joint and several liability) will be stayed pending the outcome of the appeal.

Visa Class B Common Shares and Makewhole Agreement. 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 transfer restrictions until the final resolution of certain litigation related to interchange fees involving Visa (the covered litigation), 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. Since 2018, Visa has deposited an additional \$4.3 billion into an escrow account previously established with respect to the covered litigation. As a result of the additional contributions to the escrow account, the rate at which Visa Class B common shares will convert into Visa Class A common shares was reduced to 1.5430 as of September 30, 2024.

In September 2018, Visa reached a proposed class settlement agreement covering damage claims but not injunctive relief claims regarding the covered litigation. In December 2019, the district court granted final approval for the proposed class settlement agreement. In March 2023, the Second Circuit Court of Appeals affirmed the district court's approval of the class settlement agreement. Certain merchants have opted out of the class settlement and are pursuing claims separately. The ultimate resolution of the covered litigation, the timing for removal of the selling restrictions on the Visa Class B common shares and the rate at which such shares will ultimately convert into Visa Class A common shares are uncertain.

In May 2024, Northern Trust received 2.1 million Visa Class B-2 common shares and 819.5 thousand Visa Class C common shares via its full participation in an offer to exchange outstanding shares of Visa's Class B common stock (Exchange Offer). The newly issued series of Visa Class B common shares are subject to the same transfer and convertibility restrictions as the previously outstanding Visa Class B common shares. The Visa Class C common shares will automatically be converted at the then applicable conversion rate into shares of Visa Class A common stock if transferred to a person other than a Visa member or an affiliate of a Visa member. After the initial exchange offer, Visa can, at its discretion, conduct up to three successive potential exchange offers, in each case, if more than 12 months have passed since the previous exchange offer and after a further 50% reduction of interchange fees at issue in the unresolved claims for damages in the covered litigation.

Northern Trust holds the Visa Class B-2 common shares received in the Exchange Offer at their carryover basis of zero as of September 30, 2024. Based upon the September 30, 2024, closing price of \$274.95 for a Visa Class A common share, the estimated value of Northern Trust's Visa Class B-2 common shares was approximately \$876.0 million at the current conversion rate of Visa Class B to Visa Class A common shares. The estimated value does not represent fair value given the shares' limited transferability.

Northern Trust sold 794.2 thousand Visa Class C common shares as of September 30, 2024 and recorded a realized gain of \$864.8 million on the sales through Other Operating Income for the nine months ended September 30, 2024. The remaining

Notes to Consolidated Financial Statements (unaudited) (continued)

Visa Class C common shares are recorded at their fair value of \$27.8 million in Other Assets on the consolidated balance sheets with changes in fair value recorded in Other Operating Income on the consolidated statement of income.

In conjunction with Northern Trust's participation in the Exchange Offer, Northern Trust was required to enter into the Makewhole Agreement whereby if all the Visa Class B-2 common share value is exhausted via additional escrow contributions, the Visa Class B-2 shareholders have to step in and make whole what the original Visa Class B common shares would have been obligated to cover absent the Exchange Offer. At September 30, 2024, Northern Trust has not recorded a material liability under this agreement as Northern Trust believes the likelihood that a payment under the Makewhole Agreement will have to be made is remote.

Note 21 – 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 may include foreign exchange contracts, interest rate contracts, total return swap contracts, and swaps related to the sales of certain Visa Class B common shares.

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 and risk management purposes. 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 debt 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.

The following table shows the notional and fair values of all derivative financial instruments as of September 30, 2024 and December 31, 2023.

Notes to Consolidated Financial Statements (unaudited) (continued)
TABLE 75: NOTIONAL AND FAIR VALUES OF DERIVATIVE FINANCIAL INSTRUMENTS

(In Millions)	SEPTEMBER 30, 2024			DECEMBER 31, 2023		
	NOTIONAL VALUE	FAIR VALUE		NOTIONAL VALUE	FAIR VALUE	
		ASSET ⁽¹⁾	LIABILITY ⁽²⁾		ASSET ⁽¹⁾	LIABILITY ⁽²⁾
Derivatives Designated as Hedging under GAAP						
Interest Rate Contracts						
Fair Value Hedges	\$ 9,706.3	\$ 308.9	\$ 289.7	\$ 7,042.7	\$ 94.7	\$ 71.0
Foreign Exchange Contracts						
Cash Flow Hedges	454.6	1.5	0.5	1,453.6	15.0	42.2
Net Investment Hedges	4,650.7	6.7	103.9	4,077.4	13.3	31.9
Total Derivatives Designated as Hedging under GAAP	\$ 14,811.6	\$ 317.1	\$ 394.1	\$ 12,573.7	\$ 123.0	\$ 145.1
Derivatives Not Designated as Hedging under GAAP						
Non-Designated Risk Management Derivatives						
Foreign Exchange Contracts	\$ 1.7	\$ —	\$ —	\$ 20.7	\$ —	\$ 0.1
Other Financial Derivatives ⁽³⁾	458.3	—	27.8	867.9	—	25.4
Total Non-Designated Risk Management Derivatives	\$ 460.0	\$ —	\$ 27.8	\$ 888.6	\$ —	\$ 25.5
Client-Related and Trading Derivatives						
Foreign Exchange Contracts	\$ 367,149.3	\$ 3,044.7	\$ 2,979.5	\$ 313,336.9	\$ 3,238.4	\$ 3,181.0
Interest Rate Contracts	15,378.0	157.2	214.4	13,584.1	206.8	298.2
Total Client-Related and Trading Derivatives	\$ 382,527.3	\$ 3,201.9	\$ 3,193.9	\$ 326,921.0	\$ 3,445.2	\$ 3,479.2
Total Derivatives Not Designated as Hedging under GAAP	\$ 382,987.3	\$ 3,201.9	\$ 3,221.7	\$ 327,809.6	\$ 3,445.2	\$ 3,504.7
Total Gross Derivatives	\$ 397,798.9	\$ 3,519.0	\$ 3,615.8	\$ 340,383.3	\$ 3,568.2	\$ 3,649.8
Less: Netting ⁽⁴⁾		2,773.1	1,819.9		3,126.7	2,205.4
Total Derivative Financial Instruments		\$ 745.9	\$ 1,795.9		\$ 441.5	\$ 1,444.4

⁽¹⁾ Derivative assets are reported in Other Assets on the consolidated balance sheets.

⁽²⁾ Derivative liabilities are reported in Other Liabilities on the consolidated balance sheets.

⁽³⁾ Includes swaps related to sales of certain Visa Class B common shares.

⁽⁴⁾ See further detail in Note 23—Offsetting of Assets and Liabilities.

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, net of any collateral received, which is significantly less than the notional amount.

All derivative financial instruments, whether designated as hedges or not, are recorded on the consolidated balance sheets at fair value within Other Assets or Other Liabilities. 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.

Hedging Derivative Instruments Designated under GAAP. Northern Trust uses derivative instruments to hedge its exposure to foreign currency and interest rate risk. Certain hedging relationships are formally designated and qualify for hedge accounting under GAAP as fair value, cash flow or net investment hedges.

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 a trading instrument.

Fair Value Hedges. 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. Northern Trust may enter into interest rate swaps to hedge changes in fair value of AFS debt securities and long-term subordinated debt and senior notes. Northern Trust applied the "shortcut" method of accounting, available under GAAP, which assumes there is perfect effectiveness in a hedge, for all of its fair value hedges during the three- and nine-month periods ended September 30, 2024 and 2023. 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 recognized currently in earnings within the same income statement line item.

Cash Flow Hedges. 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. Northern Trust may enter into foreign exchange contracts to hedge changes in cash flows due to movements in foreign exchange rates of forecasted foreign-currency-denominated transactions and foreign-currency-denominated debt securities. Northern Trust may also enter into interest rate contracts to hedge changes in cash flows due to movements in interest rates of AFS debt securities. The change

Notes to Consolidated Financial Statements (unaudited) (continued)

in fair value of cash flow hedging derivative instruments are recorded in AOCI and reclassified to earnings when the hedged forecasted transaction impacts earnings within the same income statement line item.

There were no material gains or losses reclassified into earnings during the three- and nine-month periods ended September 30, 2024 and 2023, as a result of the discontinuance of forecasted transactions that were no longer probable of occurring. It is estimated that net gains of \$2.7 million will be reclassified into Net Income within the next twelve months relating to cash flow hedges of foreign-currency-denominated debt securities. As of September 30, 2024, three months was the maximum length of time over which the exposure to variability in future cash flows of forecasted foreign-currency-denominated debt securities was being hedged.

The following tables provide fair value and cash flow hedge derivative gains and losses recognized in income during the three- and nine-month periods ended September 30, 2024 and 2023.

TABLE 76: LOCATION AND AMOUNT OF FAIR VALUE AND CASH FLOW HEDGE DERIVATIVE GAINS AND LOSSES RECORDED IN INCOME

(In Millions)	INTEREST INCOME		INTEREST EXPENSE		OTHER OPERATING INCOME	
THREE MONTHS ENDED SEPTEMBER 30,	2024	2023	2024	2023	2024	2023
Total amounts on the consolidated statements of income	\$ 2,530.2	\$ 1,935.0	\$ 1,967.9	\$ 1,478.8	\$ 111.8	\$ 68.2
Gains (Losses) on fair value hedges recognized on						
Interest Rate Contracts						
Recognized on derivatives	(251.6)	14.1	76.5	(41.8)	—	—
Recognized on hedged items	251.6	(14.1)	(76.5)	41.8	—	—
Amounts related to interest settlements on derivatives	29.3	11.1	(20.1)	(24.9)	—	—
Total gains (losses) recognized on fair value hedges	\$ 29.3	\$ 11.1	\$ (20.1)	\$ (24.9)	\$ —	\$ —
Gains (Losses) on cash flow hedges recognized on						
Foreign Exchange Contracts						
Net gains (losses) reclassified from AOCI to net income	\$ 0.6	\$ 14.6	\$ —	\$ —	\$ —	\$ 0.3
Total gains (losses) reclassified from AOCI to net income on cash flow hedges	\$ 0.6	\$ 14.6	\$ —	\$ —	\$ —	\$ 0.3
(In Millions)	INTEREST INCOME		INTEREST EXPENSE		OTHER OPERATING INCOME	
NINE MONTHS ENDED SEPTEMBER 30,	2024	2023	2024	2023	2024	2023
Total amounts on the consolidated statements of income	\$ 7,482.3	\$ 5,125.4	\$ 5,869.0	\$ 3,626.5	\$ 1,097.5	\$ 170.2
Gains (Losses) on fair value hedges recognized on						
Interest Rate Contracts						
Recognized on derivatives	(94.1)	0.6	46.5	(42.5)	—	—
Recognized on hedged items	94.1	(0.6)	(46.5)	42.5	—	—
Amounts related to interest settlements on derivatives	79.9	34.7	(59.9)	(65.9)	—	—
Total gains (losses) recognized on fair value hedges	\$ 79.9	\$ 34.7	\$ (59.9)	\$ (65.9)	\$ —	\$ —
Gains (Losses) on cash flow hedges recognized on						
Foreign Exchange Contracts						
Net gains (losses) reclassified from AOCI to net income	\$ 7.1	\$ 15.8	\$ —	\$ —	\$ —	\$ 1.9
Total gains (losses) reclassified from AOCI to net income on cash flow hedges	\$ 7.1	\$ 15.8	\$ —	\$ —	\$ —	\$ 1.9

Notes to Consolidated Financial Statements (unaudited) (continued)

The following table provides the impact of fair value hedge accounting on the carrying value of the designated hedged items as of September 30, 2024 and December 31, 2023.

TABLE 77: HEDGED ITEMS IN FAIR VALUE HEDGES

(In Millions)	SEPTEMBER 30, 2024		DECEMBER 31, 2023	
	CARRYING VALUE OF THE HEDGED ITEMS	CUMULATIVE HEDGE ACCOUNTING BASIS ADJUSTMENT ⁽¹⁾⁽³⁾	CARRYING VALUE OF THE HEDGED ITEMS	CUMULATIVE HEDGE ACCOUNTING BASIS ADJUSTMENT ⁽²⁾⁽³⁾
Available for Sale Debt Securities ⁽⁴⁾	\$ 7,779.7	\$ 171.9	\$ 5,048.8	\$ 77.5
Senior Notes and Long-Term Subordinated Debt	2,554.9	(190.3)	2,495.9	(248.7)

⁽¹⁾ The cumulative hedge accounting basis adjustment includes \$1.9 million related to discontinued hedging relationships of AFS debt securities and \$17.7 million related to discontinued hedging relationships in the cumulative hedge accounting basis adjustment of senior notes and long-term debt as of September 30, 2024.

⁽²⁾ The cumulative hedge accounting basis adjustment includes \$2.2 million related to discontinued hedging relationships of AFS debt securities and \$29.6 million related to discontinued hedging relationships in the cumulative hedge accounting basis adjustment of senior notes and long-term debt as of December 31, 2023.

⁽³⁾ Positive (negative) amounts related to AFS securities represent cumulative fair value hedge basis adjustments that will reduce (increase) net interest income in future periods. Positive (negative) amounts related to Senior Notes and Long-Term Subordinated Debt represent cumulative fair value hedge basis adjustments that will increase (reduce) net interest income in future periods.

⁽⁴⁾ Carrying value represents amortized cost.

Net Investment Hedges. Certain foreign exchange contracts 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. Net investment hedge losses of \$135.6 million and gains of \$129.9 million were recognized in AOCI related to foreign exchange contracts for the three months ended September 30, 2024 and 2023, respectively. Net investment hedge losses of \$36.3 million and gains of \$66.8 million were recognized in AOCI related to foreign exchange contracts for the nine months ended September 30, 2024 and 2023, respectively.

Derivative Instruments Not Designated as Hedging under GAAP. Northern Trust's derivative instruments that are not designated as hedging under GAAP include derivatives for purposes of client-related and trading activities, as well as other risk management purposes. 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.

Non-designated risk management derivatives may include foreign exchange contracts 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 pursuant to which Northern Trust retains the risks associated with the ultimate conversion of the Visa Class B common shares into Visa Class A common shares. Total return swaps are entered into to manage the equity price risk associated with certain investments.

Changes in the fair value of derivative instruments not designated as hedges under GAAP 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, 2024 and 2023 for derivative instruments not designated as hedges under GAAP.

TABLE 78: LOCATION AND AMOUNT OF GAINS AND LOSSES RECORDED IN INCOME FOR DERIVATIVES NOT DESIGNATED AS HEDGING UNDER GAAP

(In Millions)	DERIVATIVE GAINS (LOSSES) LOCATION RECOGNIZED IN INCOME	AMOUNT OF DERIVATIVE GAINS (LOSSES) RECOGNIZED IN INCOME			
		THREE MONTHS ENDED SEPTEMBER 30,		NINE MONTHS ENDED SEPTEMBER 30,	
		2024	2023	2024	2023
Non-designated risk management derivatives					
Foreign Exchange Contracts	Other Operating Income	\$ —	\$ 1.4	\$ (0.2)	\$ 2.9
Other Financial Derivatives ⁽¹⁾	Other Operating Income	(13.8)	2.4	(30.4)	(18.3)
Gains (Losses) from non-designated risk management derivatives		\$ (13.8)	\$ 3.8	\$ (30.6)	\$ (15.4)
Client-related and trading derivatives					
Foreign Exchange Contracts	Foreign Exchange Trading Income	\$ 54.1	\$ 51.8	\$ 169.5	\$ 154.9
Interest Rate Contracts	Security Commissions and Trading Income	0.9	1.2	2.8	8.1
Gains from client-related and trading derivatives		\$ 55.0	\$ 53.0	\$ 172.3	\$ 163.0
Total gains from derivatives not designated as hedging under GAAP		\$ 41.2	\$ 56.8	\$ 141.7	\$ 147.6

⁽¹⁾ Includes swaps related to the sale of certain Visa Class B common shares.

Notes to Consolidated Financial Statements (unaudited) (continued)

Note 22 – 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 either directly held by, or pledged to the counterparty until the repurchase. Northern Trust nets securities sold under repurchase agreements against those purchased under resale agreements when there is a legally enforceable master netting arrangement and the other conditions to net are met.

The following table provides information regarding repurchase agreements that are accounted for as secured borrowings as of September 30, 2024 and December 31, 2023.

TABLE 79: REPURCHASE AGREEMENTS ACCOUNTED FOR AS SECURED BORROWINGS

(In Millions)	REMAINING CONTRACTUAL MATURITY OF THE AGREEMENTS			
	SEPTEMBER 30, 2024		DECEMBER 31, 2023	
	OVERNIGHT AND CONTINUOUS			
U.S. Treasury and Agency Securities	\$	170.8	\$	784.7
Total Borrowings		170.8		784.7
Net Amount of Recognized Liabilities for Repurchase Agreements in Note 23		170.8		784.7

Note 23 – Offsetting of Assets and Liabilities

The following table provides information regarding the offsetting of derivative assets and securities purchased under agreements to resell within the consolidated balance sheets as of September 30, 2024 and December 31, 2023.

TABLE 80: OFFSETTING OF DERIVATIVE ASSETS AND SECURITIES PURCHASED UNDER AGREEMENTS TO RESELL

(In Millions)	SEPTEMBER 30, 2024				
	GROSS RECOGNIZED ASSETS	GROSS AMOUNTS OFFSET IN THE BALANCE SHEET ⁽³⁾	NET AMOUNTS PRESENTED IN THE BALANCE SHEET	GROSS AMOUNTS NOT OFFSET IN THE BALANCE SHEET ⁽⁴⁾	NET AMOUNT ⁽⁵⁾
Derivative Assets ⁽¹⁾					
Foreign Exchange Contracts Over the Counter (OTC)	\$ 2,814.6	\$ 2,664.5	\$ 150.1	\$ 10.3	\$ 139.8
Interest Rate Swaps OTC	466.1	108.6	357.5	—	357.5
Total Derivatives Subject to a Master Netting Arrangement	3,280.7	2,773.1	507.6	10.3	497.3
Total Derivatives Not Subject to a Master Netting Arrangement	238.3	—	238.3	—	238.3
Total Derivatives	3,519.0	2,773.1	745.9	10.3	735.6
Securities Purchased under Agreements to Resell ⁽²⁾	\$ 66,358.2	\$ 65,376.6	\$ 981.6	\$ 981.6	\$ —

(In Millions)	DECEMBER 31, 2023				
	GROSS RECOGNIZED ASSETS	GROSS AMOUNTS OFFSET IN THE BALANCE SHEET ⁽³⁾	NET AMOUNTS PRESENTED IN THE BALANCE SHEET	GROSS AMOUNTS NOT OFFSET IN THE BALANCE SHEET ⁽⁴⁾	NET AMOUNT ⁽⁵⁾
Derivative Assets ⁽¹⁾					
Foreign Exchange Contracts OTC	\$ 3,006.3	\$ 2,937.2	\$ 69.1	\$ 12.2	\$ 56.9
Interest Rate Swaps OTC	301.4	189.5	111.9	—	111.9
Interest Rate Swaps Exchange Cleared	0.1	—	0.1	—	0.1
Total Derivatives Subject to a Master Netting Arrangement	3,307.8	3,126.7	181.1	12.2	168.9
Total Derivatives Not Subject to a Master Netting Arrangement	260.4	—	260.4	—	260.4
Total Derivatives	3,568.2	3,126.7	441.5	12.2	429.3
Securities Purchased under Agreements to Resell ⁽²⁾	\$ 62,860.2	\$ 62,075.5	\$ 784.7	\$ 784.7	\$ —

⁽¹⁾ Derivative assets are reported in Other Assets on the consolidated balance sheets. Other Assets (excluding derivative assets) totaled \$10.4 billion and \$10.3 billion as of September 30, 2024 and December 31, 2023, respectively.

⁽²⁾ Offsetting of Securities Purchased under Agreements to Resell primarily relates to our involvement in the FICC.

⁽³⁾ Including cash collateral received from counterparties.

⁽⁴⁾ Including financial assets accepted as collateral which are received from counterparties.

⁽⁵⁾ 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, 2024 and December 31, 2023.

Notes to Consolidated Financial Statements (unaudited) (continued)

The following table provides information regarding the offsetting of derivative liabilities and securities sold under agreements to repurchase within the consolidated balance sheets as of September 30, 2024 and December 31, 2023.

TABLE 81: OFFSETTING OF DERIVATIVE LIABILITIES AND SECURITIES SOLD UNDER AGREEMENTS TO REPURCHASE

(In Millions)	SEPTEMBER 30, 2024				
	GROSS RECOGNIZED LIABILITIES	GROSS AMOUNTS OFFSET IN THE BALANCE SHEET ⁽³⁾	NET AMOUNTS PRESENTED IN THE BALANCE SHEET	GROSS AMOUNTS NOT OFFSET IN THE BALANCE SHEET ⁽⁴⁾	NET AMOUNT ⁽⁵⁾
Derivative Liabilities ⁽¹⁾					
Foreign Exchange Contracts OTC	\$ 2,226.4	\$ 1,784.0	\$ 442.4	\$ —	\$ 442.4
Interest Rate Swaps OTC	504.1	9.1	495.0	—	495.0
Other Financial Derivatives	27.8	26.8	1.0	—	1.0
Total Derivatives Subject to a Master Netting Arrangement	2,758.3	1,819.9	938.4	—	938.4
Total Derivatives Not Subject to a Master Netting Arrangement	857.5	—	857.5	—	857.5
Total Derivatives	3,615.8	1,819.9	1,795.9	—	1,795.9
Securities Sold under Agreements to Repurchase ⁽²⁾	\$ 65,547.4	\$ 65,376.6	\$ 170.8	\$ 170.8	\$ —

(In Millions)	DECEMBER 31, 2023				
	GROSS RECOGNIZED LIABILITIES	GROSS AMOUNTS OFFSET IN THE BALANCE SHEET ⁽³⁾	NET AMOUNTS PRESENTED IN THE BALANCE SHEET	GROSS AMOUNTS NOT OFFSET IN THE BALANCE SHEET ⁽⁴⁾	NET AMOUNT ⁽⁵⁾
Derivative Liabilities ⁽¹⁾					
Foreign Exchange Contracts OTC	\$ 2,411.7	\$ 2,175.7	\$ 236.0	\$ —	\$ 236.0
Interest Rate Swaps OTC	368.3	6.0	362.3	—	362.3
Interest Rate Swaps Exchange Cleared	0.9	—	0.9	—	0.9
Other Financial Derivatives	25.4	23.7	1.7	—	1.7
Total Derivatives Subject to a Master Netting Arrangement	2,806.3	2,205.4	600.9	—	600.9
Total Derivatives Not Subject to a Master Netting Arrangement	843.5	—	843.5	—	843.5
Total Derivatives	3,649.8	2,205.4	1,444.4	—	1,444.4
Securities Sold under Agreements to Repurchase ⁽²⁾	\$ 62,860.2	\$ 62,075.5	\$ 784.7	\$ 784.7	\$ —

⁽¹⁾ Derivative liabilities are reported in Other Liabilities on the consolidated balance sheets. Other Liabilities (excluding derivative liabilities) totaled \$3.3 billion and \$4.0 billion as of September 30, 2024 and December 31, 2023, respectively.

⁽²⁾ Offsetting of Securities Sold under Agreements to Repurchase primarily relates to our involvement in the FICC.

⁽³⁾ Including cash collateral deposited with counterparties.

⁽⁴⁾ Including financial assets accepted as collateral which are deposited with counterparties.

⁽⁵⁾ 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, 2024 and December 31, 2023.

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. Certain 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 offset 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. Northern Trust has elected to net securities sold under repurchase agreements against those purchased under resale agreements when the GAAP requirements to net are met.

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 has elected to net derivative assets and liabilities when legally enforceable master netting arrangements or similar agreements exist between Northern Trust and the counterparty.

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 on these instruments, net of any collateral received or deposited. The amount of credit risk will increase or decrease during the

Notes to Consolidated Financial Statements (unaudited) (continued)

lives of the instruments as interest rates, foreign exchange rates, or equity prices 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.

Additional cash collateral received from and deposited with derivative counterparties totaling \$140.3 million and \$10.0 million, respectively, as of September 30, 2024, and \$373.1 million and \$21.3 million, respectively, as of December 31, 2023, was not offset against derivative assets and liabilities in the consolidated balance sheets as the amounts exceeded the net derivative positions with those counterparties.

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 \$1.2 billion at September 30, 2024 and December 31, 2023. Cash collateral amounts deposited with derivative counterparties on those dates included \$929.3 million and \$1.1 billion, respectively, posted against these liabilities, resulting in a net maximum amount of termination payments that could have been required at September 30, 2024 and December 31, 2023, of \$270.9 million and \$52.2 million, respectively. Accelerated settlement of these liabilities would not have a material effect on the consolidated financial position or liquidity of Northern Trust.

Item 4. Controls and Procedures

As of September 30, 2024, 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, 2024, 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 20—Commitments and Contingent Liabilities included under Part I, Item 1 of this Form 10-Q is incorporated herein by reference.

Item 1A. Risk Factors

Refer to “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2023, for a discussion of risks identified as being most significant to Northern Trust.

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, 2024.

TABLE 82: REPURCHASES OF COMMON STOCK

PERIOD	TOTAL NUMBER OF SHARES PURCHASED	AVERAGE PRICE PAID PER SHARE	TOTAL NUMBER OF SHARES PURCHASED AS PART OF A PUBLICLY ANNOUNCED PLAN	MAXIMUM NUMBER OF SHARES THAT MAY YET BE PURCHASED UNDER THE PLAN
July 1 - 31, 2024	767,757	\$ 87.92	767,757	15,980,310
August 1 - 31, 2024	1,915,368	86.14	1,915,368	14,064,942
September 1 - 30, 2024	764,792	88.26	764,792	13,300,150
Total (Third Quarter)	3,447,917	\$ 87.01	3,447,917	13,300,150

On October 19, 2021, the Corporation announced a share repurchase program under which the Corporation’s Board of Directors authorized the Corporation to repurchase up to 25.0 million shares of the Corporation’s common stock. The repurchase authorization approved by the Board of Directors has no expiration date, thus the Corporation retains the ability to repurchase when circumstances warrant and applicable regulation permits. Please refer to Note 10—Stockholders’ Equity to the consolidated financial statements provided in Item 1. Consolidated Financial Statements (unaudited).

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

During the three months ended September 30, 2024, none of our directors or officers (as defined in Rule 16a-1(f) promulgated under the Securities Exchange Act of 1934, as amended) adopted, terminated or modified a Rule 10b5-1 trading arrangement or a non-Rule 10b5-1 trading arrangement (as such terms are defined in Item 408 of Regulation S-K).

Item 6. Exhibits

Exhibit Number	Description
4.1	Certain instruments defining the rights of the holders of long-term debt of the Corporation and certain of its subsidiaries, none of which authorize a total amount of indebtedness in excess of 10% of the total assets of the Corporation and its subsidiaries on a consolidated basis, have not been filed as exhibits. The Corporation hereby agrees to furnish a copy of any of these agreements to the SEC upon request.
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, 2024, formatted in Inline Extensible Business Reporting Language (iXBRL): (1) the Consolidated Balance Sheets, (2) the Consolidated Statements of Income, (3) the Consolidated Statements of Comprehensive Income, (4) the Consolidated Statements of Changes in Stockholders' Equity, (5) the Consolidated Statements of Cash Flows, and (6) Notes to Consolidated Financial Statements.
104	The cover page from this Quarterly Report on Form 10-Q, formatted in Inline XBRL.

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

I, Michael G. O'Grady, certify that:

1. I have reviewed this report on Form 10-Q for the quarterly period ended September 30, 2024, 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 29, 2024

/s/ Michael G. O'Grady

Michael G. O'Grady
Chief Executive Officer
(Principal Executive Officer)

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

I, David W. Fox, Jr., certify that:

1. I have reviewed this report on Form 10-Q for the quarterly period ended September 30, 2024, 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 29, 2024

/s/ David W. Fox, Jr.

David W. Fox, Jr.
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, 2024, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Michael G. O'Grady, as Chief Executive Officer of the Corporation, and Jason J. Tyler, 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/ Michael G. O'Grady

Michael G. O'Grady
Chief Executive Officer
(Principal Executive Officer)
Date: October 29, 2024

/s/ David W. Fox, Jr.

David W. Fox, Jr.
Chief Financial Officer
(Principal Financial Officer)
Date: October 29, 2024

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.