

Northern Trust Corporation

Pillar 3 Regulatory Disclosures

For the quarterly period ended September 30, 2014

Northern Trust Corporation

PILLAR 3 REGULATORY DISCLOSURES
For the quarterly period ended September 30, 2014

Table of Contents	Page
1 Index of Tables.....	3
2 Introduction.....	4
3 Forward-Looking Statements	5
4 Basel Capital Framework.....	6
5 Capital Structure	8
6 Capital Adequacy	13
7 Risk Management Overview	14
8 Credit Risk.....	19
9 Equities Investments Not Subject to the Market Risk Rule.....	31
10 Operational Risk.....	32
11 Market Risk	36
12 References to Northern Trust's SEC Filings.....	41

Index of Tables	Page
Table 1	Northern Trust Corporation Capital Ratios8
Table 2	Minimum Capital Ratios.....9
Table 3	Components of Regulatory Capital 10
Table 4	Risk-Weighted Assets 11
Table 5	The Northern Trust Company Capital Ratios 12
Table 6	Risk Governance Structure 14
Table 7	Credit Exposures by Geography21
Table 8	Credit Exposures by Industry, Exposure Type and Contractual Maturity ... 22
Table 9	Probability of Default Ranges 25
Table 10	Counterparty Exposures..... 28
Table 11	Securitization Exposures 30
Table 12	Securitization Exposures by Risk-Weight Bands..... 30
Table 13	Equities Not Subject to the Market Risk Rule 31
Table 14	Interest Rate Risk Simulation of Pre-Tax Earnings 37
Table 15	Interest Rate Risk Simulation of Economic Value of Equity..... 37
Table 16	Foreign Currency Value-at-Risk 39
Table 17	Foreign Currency Stressed Value-at-Risk 39

Introduction

Northern Trust Corporation (the “Corporation”) is a financial holding company that is a leading provider of asset servicing, fund administration, asset management, fiduciary and banking solutions for corporations, institutions, families and individuals worldwide. Northern Trust focuses on servicing and managing client assets through its two primary business units: Corporate & Institutional Services and Wealth Management. Asset management and related services are provided to Wealth Management and Corporate & Institutional Services primarily by a third business unit, Asset Management. The Corporation conducts business through various U.S. and non-U.S. subsidiaries, including through its principal subsidiary, The Northern Trust Company (the “Bank”). At September 30, 2014, the Corporation had consolidated total assets of \$111.2 billion and stockholders’ equity of \$8.5 billion.

Under U.S. law, the Corporation is a bank holding company that has elected to be a financial holding company under the Bank Holding Company Act of 1956, as amended. Consequently, the Corporation and its business activities throughout the world are subject to the supervision, examination, and regulation of the Federal Reserve Board (the “Federal Reserve”). The Federal Reserve has established risk-based and leverage capital guidelines for bank holding companies, including the Corporation. As discussed below, on July 2, 2013, the Federal Reserve issued final rules implementing a strengthened set of capital requirements, known as Basel III, in the United States.

The Basel Capital Framework, as described below, requires new disclosures based on the third pillar of Basel III (“Pillar 3”). The purpose of Pillar 3 disclosures is to provide information on banking institutions’ regulatory capital and risk management practices. This report is designed to satisfy these requirements and should be read in conjunction with Northern Trust’s Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2014 (the “Third Quarter 2014 Form 10-Q”) and Northern Trust’s Annual Report on Form 10-K for the year ended December 31, 2013 (the “2013 Annual Report”).

Except where the context otherwise requires, when we use the terms “Northern Trust”, “we,” “us,” and “our”, we mean Northern Trust Corporation and its subsidiaries on a consolidated basis. The basis of consolidation used for regulatory reporting is consistent with that used under U.S. generally accepted accounting principles (“GAAP”).

- Refer to Note 1 within Northern Trust’s 2013 Annual Report for further information on the basis of presentation of the Corporation’s financial statements.

Measures of exposures and other metrics disclosed in this report may not be based on GAAP, may not be directly comparable to measures reported in our Third Quarter 2014 Form 10-Q or 2013 Annual Report, and may not be comparable to similar measures used by other companies. These disclosures are not required to be, and have not been, audited by our independent auditors. Our historical filings with the U.S. Securities and Exchange Commission (the “SEC”) and other regulatory disclosure documents are located in the Investor Relations section of our website at www.northerntrust.com.

Forward-Looking Statements

This report may include forward-looking statements such as statements concerning Northern Trust’s financial results and outlook, capital adequacy, dividend policy, risk management policies, contingent liabilities, strategic initiatives, industry trends, and expectations regarding the impact of recent legislation. Forward-looking statements are typically identified by words or phrases such as “believe”, “expect”, “anticipate”, “intend”, “estimate”, “project”, “likely”, “may increase”, “plan”, “goal”, “target”, “strategy”, and similar expressions or future or conditional verbs such as “may”, “will”, “should”, “would”, and “could”. Forward-looking statements are Northern Trust’s current estimates or expectations of future events or future results, and involve risks and uncertainties that are difficult to predict. These statements are based on assumptions about many important factors, including the factors discussed in Northern Trust’s 2013 Annual Report and other filings with the SEC, all of which are available on Northern Trust’s website. We caution you not to place undue reliance on any forward-looking statement as actual results may differ materially from those expressed or implied by forward-looking statements. Northern Trust assumes no obligation to update its forward-looking statements.

Basel Capital Framework

On September 12, 2010, the Group of Governors and Heads of Supervision, the oversight body of the International Basel Committee on Banking Supervision, announced agreement on the calibration and phase-in arrangements for the Basel III capital requirements. On July 2, 2013, the Federal Reserve issued final rules implementing Basel III capital requirements in the United States. The U.S. implementation of Basel III, among other things, increases the minimum capital thresholds for banking organizations and tightens the standards for what qualifies as capital; introduces a new Common Equity Tier 1 capital measure; and presents two methodologies for calculating risk-weighted assets, a standardized approach and an advanced approach. For large and internationally active banks and bank-holding companies, including the Bank and the Corporation, Basel III became effective on January 1, 2014, though certain requirements will be phased in over several years.

The Basel capital framework seeks the alignment of capital requirements with the underlying risks a bank faces and consists of three complementary “pillars” designed to reinforce the safety and soundness of the financial system.

Pillar 1 — Minimum Capital Requirements

Pillar 1 provides a framework for calculating minimum regulatory capital requirements. Pillar 1 consists of three risk types: credit risk, operational risk and market risk.

Pillar 2 — Supervisory Review

Pillar 2 addresses the need for banks to consider all material risks and determine the level of capital required to remain solvent during extreme circumstances and requires banks to have sound internal capital adequacy assessment processes. The internal capital adequacy assessment process includes setting objectives for capital that are consistent with the bank’s risk profile and the control environment in which it operates.

Pillar 3 — Risk Disclosure and Market Discipline

Pillar 3 requires qualitative and quantitative descriptions of capital structure, capital adequacy, internal control processes, risk management and the nature of underlying risks. The purpose of Pillar 3 disclosures is to provide information on banking institutions’ regulatory capital and risk management practices.

On February 21, 2014, the Corporation was notified by the Federal Reserve that both the Corporation and the Bank would be permitted to exit parallel run. Accordingly, the Corporation and the Bank are required to use the advanced approaches methodologies to calculate and publicly disclose their risk-based capital ratios beginning with the second quarter of 2014. These methodologies include the Advanced Internal Ratings

Pillar 3 Regulatory Disclosures

Based approach (“AIRB”) for credit risk, the Advanced Measurement Approach (“AMA”) for operational risk and the Market Risk Rule for market risk. In order to complete the parallel run to the satisfaction of its supervisors, a bank is required to demonstrate that, over a period of at least four consecutive quarters, it meets the qualification requirements of the Basel III advanced rules.

These qualification requirements address the following areas: the bank’s governance processes and systems for maintaining adequate capital commensurate with its risk profile; its internal systems for segmenting exposures and applying risk weights; its quantification of risk parameters used including its model-based estimates of exposures; its operational risk management processes, data management and quantification systems; the data management systems that are designed to support the timely and accurate reporting of risk-based capital requirements; and the control, oversight and validation mechanisms exercised by senior management and by the Board of Directors. Once a bank has completed the parallel run, it is required to meet these requirements on an ongoing basis, and to notify supervisors of any change to a system that would result in a material change in its risk-weighted assets for an exposure type, or when it makes any significant change to its modeling assumptions.

Capital Structure

Regulatory Capital

Under the final Basel rules of a provision of the Dodd-Frank Act, the Collins amendment, Northern Trust is subject to a capital floor that is based on the Basel standardized approach. We are therefore required to calculate our risk-based capital ratios under both the standardized and advanced approaches and are subject to the more stringent of the risk-based capital ratios as calculated under the standardized approach and the advanced approach in the assessment of our capital adequacy under the prompt corrective action framework. The Corporation's capital ratios as of September 30, 2014, are shown in the following table.

Table 1: Northern Trust Corporation Capital Ratios

(\$ In Millions)	As of September 30, 2014	
	Basel Standardized Transitional	Basel Advanced Transitional
Regulatory Capital		
Common Equity Tier 1 Capital	\$ 7,812	\$ 7,812
Tier 1 Capital	8,296	8,297
Total Capital	9,739	9,466
Assets		
Risk-Weighted Assets	\$ 61,004	\$ 61,885
Average Adjusted Total Assets	104,625	104,625
Capital Ratios		
Common Equity Tier 1	12.8%	12.6%
Tier 1	13.6%	13.4%
Total Capital	16.0%	15.3%
Leverage (a)	7.9%	N/A

(a) Effective January 1, 2018, advanced approaches institutions, such as the Corporation, will be subject to a minimum supplementary leverage ratio of 3.0%, which will include certain off-balance sheet exposures in its calculation.

The Common Equity Tier 1 ratio is defined as Common Equity Tier 1 capital divided by risk-weighted assets; the Tier 1 ratio is defined as Tier 1 capital divided by risk-weighted assets; and the Total Capital ratio is defined as Total capital divided by risk-weighted assets. The Leverage ratio is defined as Tier 1 capital divided by average adjusted total assets (which includes adjustments for goodwill and identifiable intangible assets).

Pillar 3 Regulatory Disclosures

Northern Trust is required to maintain minimum ratios of capital to risk-weighted assets and adjusted quarterly average assets, the current levels of which are as shown in the following table.

Table 2: Minimum Capital Ratios

	As of September 30, 2014	
	Well-Capitalized Ratios (a)	Minimum Capital Ratios (a)
Capital Ratios		
Common Equity Tier 1	N/A	4.0%
Tier 1	6.0%	5.5%
Total	10.0%	8.0%
Leverage	5.0% (b)	4.0%

(a) As defined by the regulations issued by the Federal Reserve, Office of the Comptroller of the Currency and FDIC. In addition to the 2014 well-capitalized standards, beginning January 1, 2015, Basel III Transitional Common Equity Tier 1 capital, the Basel III Standardized Transitional and the Basel III Advanced Transitional Common Equity Tier 1 capital ratios become relevant capital measures under the prompt corrective action requirements defined by the regulations.

(b) Represents requirements for bank subsidiaries pursuant to regulations issued under the FDIC Improvement Act. There is no Tier 1 leverage component in the definition of a well-capitalized bank holding company.

For regulatory purposes, Northern Trust's capital is classified into Common Equity Tier 1 capital, Tier 1 capital and Tier 2 capital. Under the Basel transitional provisions, certain items are phased in from 2014 through 2018, including the capital treatment for accumulated other comprehensive income, floating rate capital securities and other items required for risk-based capital calculations.

The methods for the calculation of Northern Trust's risk-based capital ratios will change as the provisions of the Basel III final rule related to the numerator (capital) and denominator (risk-weighted assets) are phased in, and as the calculation of our standardized risk-weighted assets moves from being based on Basel I to Basel III in 2015. These ongoing methodology changes will result in differences in our reported capital ratios from one reporting period to the next that are independent of applicable changes to our capital base, asset composition, off-balance sheet exposures or risk profile.

Pillar 3 Regulatory Disclosures

The table below presents the components of the Corporation's regulatory capital as defined under Basel as of September 30, 2014.

Table 3: Components of Regulatory Capital

	Basel Standardized Transitional	Basel Advanced Transitional
Regulatory Capital		
Common Stock and Related Surplus	\$ 903	\$ 903
Retained Earnings	7,469	7,469
Accumulated Other Comprehensive Income	(218)	(218)
Common Stockholders' Equity	\$ 8,154	\$ 8,154
Adjustments for:		
Accumulated Other Comprehensive Income	172	172
Goodwill and Other Intangible Assets (Net of deferred tax liability)	(504)	(504)
Other	(10)	(10)
Common Equity Tier 1 Capital	\$ 7,812	\$ 7,812
Preferred Stock	389	389
Floating Rate Capital Securities	134	134
Other	(39)	(38)
Tier 1 Capital	\$ 8,296	\$ 8,297
Long-Term Debt (a)	1,049	1,049
Floating Rate Capital Securities	134	134
Inherent Allowance for Credit Losses	274	
Other	(14)	(14)
Total Capital	\$ 9,739	\$ 9,466

(a) Long-term debt that qualifies for risk-based capital amortizes for the purpose of inclusion in Tier 2 capital during the five years before maturity.

- Refer to Note 12 and Note 13 within Northern Trust's 2013 Annual Report for the terms and conditions of the main features of all regulatory capital instruments.

Risk-Weighted Assets

The Corporation's risk-weighted assets as calculated under Basel methodologies as of September 30, 2014, are presented in the following table. For credit risk, the Basel Standardized Transitional risk-weighted assets reflect prescribed regulatory risk-weights while the Basel Advanced risk-weighted assets reflect the results of the AIRB approach, which is described in the Credit Risk section. Market risk-weighted assets are calculated based on the final Market Risk Rule approved by the Federal Reserve in June 2012, and are identical for both the standardized and advanced approaches. Market risk is further discussed in the Market Risk section. Risk-weighted assets as

Pillar 3 Regulatory Disclosures

calculated under the advanced approaches may show variability over time due to changes in data, methodology, models, regulatory guidance or other items.

Table 4: Risk-Weighted Assets

(\$ In Millions)	As of September 30, 2014	
	Basel Standardized Transitional	Basel Advanced Transitional
Wholesale Exposures	\$ 55,184	\$ 39,776
Securitization Exposures	580	1,153
Equity Exposures	390	572
Other Assets	4,644	4,130
Credit Valuation Adjustment (a)	N/A	735
Total Credit Risk-Weighted Assets	\$ 60,798	\$ 46,366
Operational Risk-Weighted Assets (b)	N/A	\$ 15,313
Market Risk-Weighted Assets	\$ 206	\$ 206
Total Risk-Weighted Assets	\$ 61,004	\$ 61,885

(a) The credit valuation adjustment is included only in the Basel Advanced calculations.

(b) Operational risk-weighted assets are included only in the Basel Advanced calculations and are the result of the AMA approach, which is described in the Operational Risk section.

The Northern Trust Company and Our Other Subsidiaries

The Bank is an Illinois banking corporation headquartered in Chicago, Illinois, and, as discussed above, is our principal subsidiary. Founded in 1889, the Bank conducts its business through its U.S. operations and its various U.S. and non-U.S. branches and subsidiaries. At September 30, 2014, the Bank had consolidated assets of \$110.8 billion and equity capital of \$7.5 billion.

It is expected that the Bank will continue in the foreseeable future to be the major source of our consolidated assets, revenues and net income.

The Bank's capital ratios at September 30, 2014, are shown in the following table.

Table 5: The Northern Trust Company Capital Ratios

The Northern Trust Company As of September 30, 2014		
	Basel Standardized Transitional	Basel Advanced Transitional
Capital Ratios		
Common Equity Tier 1	11.6%	11.7%
Tier 1	11.6%	11.7%
Total	14.0%	13.7%
Leverage (a)	6.8%	N/A

(a) Effective January 1, 2018, advanced approaches institutions, such as the Corporation, will be subject to a minimum supplementary leverage ratio of 3.0%, which will include certain off-balance sheet exposures in its calculation.

Northern Trust's subsidiary banks located outside the U.S. are also subject to regulatory capital requirements in the jurisdictions in which they operate. As of September 30, 2014, each of Northern Trust's subsidiaries, including the Bank, had capital ratios above their specified minimum requirements.

- Refer to Note 30 within Northern Trust's 2013 Annual Report and page 12 of Northern Trust's 2013 Annual Report for a description of restrictions on transactions between the Corporation and its subsidiaries.

Capital Adequacy

One of Northern Trust's primary objectives is to maintain a strong capital position to merit the confidence of clients, counterparties, creditors, regulators and shareholders. A strong capital position helps Northern Trust pursue strategic opportunities and withstand unforeseen adverse developments.

In addition to the risk management organization and activities described below in the Risk Management Overview section, Northern Trust manages its capital on both a consolidated and legal entity basis. The Capital Committee is responsible for measuring and managing the Corporation's and Bank's capital ratios against levels set forth within the Capital Management Policy approved by the Board of Directors.

Northern Trust's capital adequacy assessment process, overseen by the Capital Committee, provides the framework for evaluating the adequacy of capital levels against capital requirements for both the current and projected periods given its risk profile and business growth objectives. The capital adequacy assessment process contains three main components:

- Assessing required capital needs for risks that can be reliably quantified;
- Understanding the sensitivity of Northern Trust's earnings, balance sheet, risk-weighted assets and capital ratios to current or potential changes in Northern Trust's risk profile and/or economic conditions; and
- Evaluating the potential impact of all material risks on Northern Trust's capital position, and its resulting ability to meet its capital management objectives under a wide range of scenarios, including severely stressful conditions.

The stress scenarios included in Northern Trust's capital adequacy assessments are developed with consideration given to the Corporation's risk profile, key vulnerabilities, business activities and strategic plans, and can include both stressful macroeconomic conditions and idiosyncratic loss events. Northern Trust's capital adequacy assessments are approved by the Board of Directors quarterly, support the annual Capital Plan and are closely coordinated with the liquidity risk management processes.

Risk Management Overview

Northern Trust has an integrated Enterprise Risk Management (“ERM”) Framework that consists of risk management policies, programs and practices that are designed to keep risk and losses at acceptable levels and provide a consistent understanding of risk management throughout the organization. The ERM Framework establishes a link between the execution of Northern Trust’s strategies and its Corporate Risk Appetite Statement, which is discussed further in the Risk Management Process section. The ERM Framework is built around five core components: governance, risk universe, risk management processes, people and systems.

- Refer to page 32 and 39 of Management’s Discussion and Analysis of Financial Condition and Results of Operation (“MD&A”) within Northern Trust’s 2013 Annual Report for more information on Northern Trust’s Liquidity Risk Management and Risk Management processes.

Risk Governance

Risk governance is an integral aspect of corporate governance and focuses on the structure, processes and approach to the management of the key material risks inherent in our businesses. For Northern Trust, this includes clearly defined accountabilities, expectations, systems for internal control and processes for risk-based decision-making and escalation of issues. The diagram below provides a high-level overview of Northern Trust’s risk governance structure, highlighting the oversight of the Board of Directors and key risk-related committees.

Table 6: Risk Governance Structure

Northern Trust Corporation Board of Directors				
Audit Committee	Business Risk Committee	Business Strategy Committee	Compensation and Benefit Committee	

Global Enterprise Risk Committee (GERC)				
Asset & Liability Management Policy Committee	Credit Policy Committee	Fiduciary Risk Committee	Operational Risk Committee	Compliance & Ethics Oversight Committee

The Board of Directors provides oversight of risk management directly as well as through its committees.

The Audit Committee provides oversight with respect to financial reporting and legal compliance risks.

Pillar 3 Regulatory Disclosures

The Business Risk Committee provides oversight with respect to the risks inherent in Northern Trust's businesses in the following categories: credit risk, market and liquidity risk, fiduciary risk, operational risk and compliance risk.

The Business Strategy Committee provides oversight with respect to strategic risk for the Corporation and its subsidiaries.

The Compensation and Benefits Committee assesses the extent to which Northern Trust's incentive compensation arrangements and practices discourage inappropriate risk taking behavior by participants.

The Corporation's Chief Risk Officer oversees Northern Trust's management of risk, promotes risk awareness and fosters a proactive risk management environment wherein risks inherent in business strategy are understood and appropriately monitored and mitigated. In addition, the Chief Risk Officer regularly advises the Business Risk Committee of the Board of Directors of relevant risk metrics and exposures. A business unit chief risk officer is assigned to each of Northern Trust's business units and each chairs a risk committee for their respective business unit on a regular basis and reports directly to the Corporation's Chief Risk Officer. Each business unit risk committee reports to the Global Enterprise Risk Committee, a committee comprised of the Chief Executive Officer, Chief Financial Officer, President, Chief Operating Officer, Chief Risk Officer, General Counsel, Executive Vice President, Human Resources and other business leaders. The Global Enterprise Risk Committee reports to the Business Risk Committee of the Board of Directors.

The Asset & Liability Management Policy Committee establishes and monitors Northern Trust's market and liquidity risk frameworks and policies as well as actively manages Northern Trust's market and liquidity risks.

The Credit Policy Committee establishes and monitors credit-related policies and practices throughout Northern Trust and promotes their uniform application.

The Fiduciary Risk Committee is responsible for establishing and reviewing the fiduciary risk policies and establishing the fiduciary risk framework, governance and programs that support the coordination of fiduciary risk activities to identify, monitor, manage and report on fiduciary risk.

The Operational Risk Committee is responsible for setting operational risk policies, framework and programs that support the coordination and oversight of operational risk activities to identify, monitor, manage, measure and report on operational risk.

The Compliance & Ethics Oversight Committee establishes and monitors adherence to the Corporation's Compliance and Ethics Program.

Risk Management at Northern Trust is aligned across business units, regions and specific risk practices. For more detail on risk practices at Northern Trust, see the relevant discussions on pages 19, 32 and 36.

Risk Universe

The risk universe represents the major risk categories and sub-categories to which Northern Trust may be exposed. Under the direction of the Chief Risk Officer, the risk universe is reviewed at least annually by senior risk officers. The risks identified in the risk universe are actively monitored by senior risk officers across the Corporation.

Northern Trust has six risk categories that are the highest level of the risk universe. These risk categories are credit, market and liquidity, fiduciary, operational, compliance and strategic risk.

Risk Management Processes

Risk management continuously identifies, assesses, monitors and measures risks against corporate risk appetite, guidelines and thresholds. When appropriate, actions are taken to reduce risk.

To support a comprehensive framework, Northern Trust has established four key processes as described below. These processes apply to each risk area discussed in this report.

- Risk Appetite – The Board of Directors has approved a Corporate Risk Appetite Statement that articulates Northern Trust’s expectation that risk is consciously considered as part of day-to-day activities and strategic decisions. Northern Trust manages its business activities consistent with the Corporate Risk Appetite Statement, in which specific guidelines are detailed for credit, market and liquidity, fiduciary, operational, compliance and strategic risk.
- Assessment of Risks – Northern Trust’s risk assessment process consists of a series of programs that identify, manage and measure risks. Risk assessments are performed on a regular basis by business unit risk management and facilitated by the Risk Management function. The risk assessment process draws on the input of management, staff and risk personnel across the business, focusing on the inherent drivers of risk, the effectiveness of controls and the resulting residual risks.
- Risk Management Embedding – Risk management embedding demonstrates that risk management processes stretch beyond risk assessment and measurement, and are included in strategic and business planning and decision making. Although the Risk Management function sets the direction for Northern Trust’s risk management activities, the business units are the first line of defense

for protecting Northern Trust against the risks inherent in its businesses and are supported by dedicated business unit risk management teams.

- Risk Reporting, Review and Communication – The risk reporting, review and communication process produces risk reports that provide updates on the risk profile, performance against risk guidelines and thresholds, and analysis and trend information, all of which highlight top and emerging risks for management and the Board of Directors.

People

The ERM Framework sets out the roles and responsibilities of business units and risk oversight and assurance functions that are embedded within the organization and is designed to ensure an appropriate level of understanding of the ERM Framework, the approved Corporate Risk Appetite Statement and other risk guidelines. In addition, Northern Trust reinforces a culture of effective risk management when training and developing employees and evaluating and rewarding employee performance.

Systems

Risk data and technology form the infrastructure that enables the successful execution of risk management processes. Data quality principles (such as accuracy, consistency and integrity) are an integral element of Northern Trust's risk measurement and management process, ensuring quality, control and protection of the risk data and systems at both corporate and business unit levels.

Independent Review and Verification

Audit Services

Northern Trust's Audit Services department ("Audit Services") is an independent control function that assesses and validates controls within Northern Trust's ERM Framework. Audit Services tests the overall adequacy and effectiveness of the system of internal controls, associated with the advanced systems, on an ongoing basis and reports the results of these audits directly to the Audit Committee of the Board of Directors.

Risk Control

Risk Control is an internal, independent review function within the Risk function. Risk Control is managed by the Chief Risk Control Officer with oversight from the Business Risk Committee of the Board of Directors. Risk Control is comprised of the following four groups, each with its own risk focus and oversight:

- Model Risk Management;
- Basel Independent Verification;
- Credit Review; and
- Global Compliance Testing.

Model Risk Management

Financial and risk modeling are used by Northern Trust to inform numerous decisions regarding risk management, as well as capital estimation, financial reporting and disclosure, valuation and pricing and portfolio management. Model risk may result from decisions based on models that produce incorrect results or that are improperly used. Model Risk Management is responsible for independently validating new models and reviewing and re-validating existing models. Validations are documented and include an assessment of the conceptual soundness of the modeling approach, applicability of use, model assumptions and limitations, development documentation, ongoing monitoring and model controls. Oversight of Model Risk Management is provided by the Operational Risk Committee as Northern Trust considers model risk to be an operational risk.

Basel Independent Verification

The Basel Independent Verification program promotes rigor and accuracy in the Corporation's ongoing compliance with Basel requirements. The program independently verifies the Corporation's advanced systems in order to comply with the qualification requirements related to the AIRB and AMA approaches. The Basel Independent Verification program assesses the effectiveness of the Credit Risk, Operational Risk, Market Risk, Capital Adequacy and Disclosure frameworks. The Basel Independent Verification team presents an annual assessment report of its findings to the Board of Directors or its designated committee, who is required to review and approve the effectiveness of the advanced systems each year.

Credit Review

Credit Review provides an independent, ongoing assessment of credit exposure and related credit risk management processes across the Corporation. The scope of Credit Review activities includes all client related transactions that give rise to credit exposure and processes that are designed to manage or monitor such exposure. Credit exposure includes credit risk inherent in the entire portfolio, as well as individual credits or transactions in the form of direct outstandings, potential exposure and contingent liabilities that are on- or off-balance sheet. The Business Risk Committee of the Board of Directors provides oversight of Credit Review.

Global Compliance Testing

Global Compliance testing evaluates the effectiveness of procedures and controls designed to comply with relevant laws and regulations, as well as corresponding Northern Trust policies governing regulatory compliance activities. Global Compliance Testing identifies weaknesses that could result in regulatory compliance violations or risks to Northern Trust's businesses and monitors action plans designed to mitigate those weaknesses. Oversight of Global Compliance Testing activities is provided by the Compliance & Ethics Oversight Committee.

Credit Risk

Credit risk is the risk to earnings and/or capital arising from the failure of a borrower, issuer or counterparty to perform as agreed on an obligation. Credit risk is inherent in many of Northern Trust's activities. A significant component of credit risk relates to the loan portfolio. In addition, credit risk is inherent in certain contractual obligations such as legally binding commitments to extend credit, commercial letters of credit and standby letters of credit.

Credit Risk Disclosures – General Qualitative

Credit Risk Framework

The Credit Risk Management function is the focal point of the credit risk management framework and works closely with the business units to achieve the goal of assuring proactive credit risk management. Credit Risk Management approves policies, establishes the Credit Risk Framework and monitors adherence to corporate policies, external regulations and established procedures. Credit Risk Management is independent of business unit management, reporting directly to the Corporation's Chief Risk Officer. Oversight of credit risk is provided by the Business Risk Committee of the Board of Directors.

Credit risk is most effectively managed at the source. Accordingly, it is the responsibility of each business unit to implement an effective internal risk management program. Business units are supported in their credit risk efforts by business unit chief risk officers, who report directly to the Corporation's Chief Risk Officer and indirectly into their respective business units.

Credit risk is monitored through a system of internal controls and risk management practices that are designed to keep credit risk at levels appropriate to Northern Trust's overall Corporate Risk Appetite Statement.

Northern Trust's primary risk mitigation approaches include the requirement of collateral and/or documented guarantees. Risk mitigation techniques specifically applied to counterparty-related exposures include netting with collateral support agreements and the use of CLS (an industry-owned multicurrency settlement system for foreign exchange transactions). Risk mitigation is described more fully in the Credit Risk Mitigation section below.

Another important risk management practice is the avoidance of undue concentrations of exposure, such as in any single (or small number of related) obligor/counterparty, loan type, industry, geography, country or risk mitigant. Processes are in place to establish limits on certain concentrations and the monitoring of adherence to the limits.

Loans and Leases and Allowance for Credit Losses

- Refer to Note 5 and Note 6 within Northern Trust's Third Quarter 2014 Form 10-Q and pages 27 and 40 of the MD&A within Northern Trust's 2013 Annual Report for loans and leases and allowance for credit losses qualitative information.

Credit Risk Disclosures – General Quantitative

Northern Trust's credit risk generally takes the form of loans, leases, securities and counterparty-related exposures. Northern Trust's entire credit risk portfolio is included within the following Basel credit categories: wholesale exposures, securitization exposures and equity holdings. All Basel credit exposures that could otherwise qualify for retail treatment, such as personal loans and mortgages, are treated as wholesale exposures. We have determined that applying wholesale treatment, i.e. individually risk-rating each exposure rather than scoring a homogenous pool, is consistent with Northern Trust's underwriting approach, whereby each exposure is individually evaluated.

Loans and Leases and Allowance for Credit Losses

- Refer to Note 5 and Note 6 within Northern Trust's Third Quarter 2014 Form 10-Q for loans and leases and allowance for credit losses quantitative information, respectively.

Credit Exposures by Geography and Industry

The following tables provide Northern Trust's total credit exposures by regulatory reporting category and geographic distribution as of, and on an average basis, for the three months ended, September 30, 2014. Distribution is based on geographic location of the contracting Northern Trust entity.

Table 7: Credit Exposures by Geography

(\$ In Millions)		As of September 30, 2014			
Credit Exposures	Americas	Europe, Middle East and Africa	Asia- Pacific	Total	
Loans, net of Unearned Income and Allowance	\$ 29,282	\$ 1,161	\$ 8	\$ 30,451	
Loan Commitments	37,766	697	-	38,463	
Balances Due from Depository Institutions	22,123	16,057	2,747	40,927	
Securities	28,385	2,274	172	30,831	
Trading Assets	172	1,480	227	1,879	
Total	\$ 117,728	\$ 21,669	\$ 3,154	\$142,551	

(\$ In Millions)		Averages for the three months ended September 30, 2014			
Credit Exposures	Americas	Europe, Middle East and Africa	Asia- Pacific	Total	
Loans, net of Unearned Income and Allowance	\$ 28,875	\$ 1,023	\$ 85	\$ 29,983	
Loan Commitments	37,703	702	-	38,405	
Balances Due from Depository Institutions	16,467	17,070	2,722	36,259	
Securities	29,315	2,297	126	31,738	
Trading Assets	234	631	82	947	
Total	\$ 112,594	\$ 21,723	\$ 3,015	\$137,332	

Pillar 3 Regulatory Disclosures

The following table provides Northern Trust's credit exposures by industry and exposure type with the associated contractual maturity as of September 30, 2014.

Table 8: Credit Exposures by Industry, Exposure Type and Contractual Maturity

(\$ In Millions)	As of September 30, 2014			
	Up to 1 Year	1 to 5 Years	Over 5 Years	Total
Commercial Exposures				
Services	\$ 2,720	\$ 7,592	\$ 609	\$ 10,921
Manufacturing	1,245	9,321	186	10,752
Finance and Insurance	3,064	2,726	3	5,793
Retail Trade/Wholesale Trade	677	2,203	17	2,897
Energy	368	2,285	90	2,743
Education and Health Care	1,385	702	76	2,163
Transportation and Warehousing	105	641	276	1,022
Arts, Entertainment and Recreation	274	582	40	896
Public Administration	247	199	219	665
All other industries	1,320	125	480	1,925
Total Commercial Exposures	\$ 11,405	\$ 26,376	\$ 1,996	\$ 39,777
Personal Exposures	7,779	5,873	314	13,966
Residential Real Estate Exposures	689	2,244	8,524	11,457
Commercial Real Estate Exposures	754	2,272	688	3,714
Total Loan Related Credit Exposure	\$ 20,627	\$ 36,765	\$ 11,522	\$ 68,914
Balances Due from Depository Institutions	40,927	-	-	40,927
Securities	3,716	14,729	12,386	30,831
Trading Assets	1,879	-	-	1,879
Total Exposures	\$ 67,149	\$ 51,494	\$ 23,908	\$ 142,551

- Refer to page 42 of the MD&A within Northern Trust's 2013 Annual Report for information on undrawn commitments by industry sectors.

Advanced Internal Ratings Based Approach for Credit Risk

Internal Rating System Overview

An integral component of credit risk measurement is Northern Trust's internal risk rating system. Northern Trust's internal risk rating system enables identification, measurement, approval and monitoring of credit risk. Northern Trust uses the AIRB approach to calculate regulatory capital using regulatory formulas and exposure level risk information from Northern Trust's internal rating system that estimates entity-specific information about the obligor's or counterparty's probability of default ("PD") and exposure-specific information about loss given default ("LGD"), exposure at default ("EAD") and maturity. Risk rating models are used to determine each credit exposure's PD, EAD and LGD. Northern Trust's internal risk rating system is intended to rank order its credit risk without any intentional linkage to external credit ratings.

Obligors are assigned PDs after consideration of both quantitative and qualitative factors. Although the criteria vary, the objective is for assigned PDs to be consistent in the measurement and ranking of risk. LGD and EAD are assigned based on obligor, product, collateral and instrument characteristics.

Risk ratings are assigned at the time an obligation is approved, renewed or amended. Risk ratings are reviewed annually or when new information relevant to the rating is received. Risk ratings are utilized for credit underwriting, management reporting and the calculation of regulatory capital.

The Credit Risk Management function is responsible for the ongoing oversight of each model that supports the internal risk rating system. This includes the development, monitoring and maintenance of the models, as well as providing information to the Credit Policy Committee to support model approval and monitoring of ongoing model performance. Independent model governance and oversight is further supported by the activities of Risk Control as described further in Independent Review and Verification within the Risk Management Overview section.

PD, EAD and LGD Estimation

Northern Trust has developed internal estimates of PD, EAD and LGD, each as defined below:

Probability of default (“PD”) – defined as the empirically-based best estimate of the long-run average one-year default rate for the rating grade assigned to an obligor, capturing the average default experience for obligors in the rating grade over a mix of economic conditions sufficient to provide a reasonable estimate.

Exposure at default (“EAD”) – defined across various exposures types as:

- On-balance sheet (other than Over the Counter (“OTC”) derivative, repo-style transactions or eligible margin loans) – the carrying value, less any allocated transfer risk reserve (and for available for sale securities, less unrealized gains, plus unrealized losses).
- Off-balance sheet (other than OTC derivative repo-style transactions or eligible margin loans) – the best estimate of net additions to outstanding amounts owed that are likely to occur over a one-year horizon, assuming the exposure were to go into default. For anything other than a loan commitment, line of credit, trade-related letter of credit or transaction-related contingency, EAD is the notional amount.
- OTC derivative, repo-style transaction or eligible margin loan – as defined by section 32 of Basel US Final Rule.

Loss given default (“LGD”) – defined as the greater of:

- An empirically-based best estimate of long-run default-weighted average economic loss, per dollar of EAD, that would be incurred if an obligor were to default within a one-year horizon over a mix of economic conditions; or
- An empirically-based best estimate of the economic loss, per dollar of EAD that would be incurred if an obligor were to default within a one-year horizon during a period of economic downturn.

PD, EAD and LGD parameter values are estimated using quantitative analysis of internal and external data, informed by a qualitative assessment based on business subject matter expertise. The parameter estimation (quantification) process is conducted in four phases: (1) research and exploratory data analysis, (2) detailed data analytics and modeling, (3) qualitative assessment of results and recommendations, and (4) formal review and approval.

Data used for estimation and validation of PD, EAD and LGD parameters comes from three sources:

- Internal credit defaults and recoveries experienced by Northern Trust;
- External credit default and recovery data for comparative benchmark data (not directly combined with internal default history); and
- Industry studies and academic works related to credit risk and defaults.

Control Mechanisms

Independent oversight and review of the internal risk rating system is provided by Audit Services and Risk Control as described in Independent Review and Verification within the Risk Management Overview section.

Pillar 3 Regulatory Disclosures

The following table provides a distribution of EAD, Risk-Weighted Assets (“RWA”), Weighted Average PD, Weighted Average LGD and Weighted Average Risk-Weights by PD ranges as of September 30, 2014.

Table 9: Probability of Default Ranges

(\$ In Millions)		As of September 30, 2014					
	PD Range	EAD Amount	RWA Amount (a)	Weighted Average PD	Weighted Average LGD	Weighted Average Risk-Weight	Unfunded Commitments
Wholesale	0.0% to <0.15%(b)	\$ 80,522	\$ 5,567	0.04%	41.27%	6.91%	\$ 14,755
	0.15% to <0.50%	35,749	11,476	0.23%	36.10%	32.10%	18,586
	0.50% to <1.35%	12,596	9,893	0.81%	39.55%	78.54%	2,834
	1.35% to <10.00%	8,208	9,580	3.66%	36.89%	116.71%	2,196
	10.00% to <100%	321	639	26.36%	37.28%	199.09%	82
	<100%	368	368	100.00%	28.28%	100.00%	10
Total	0.0% to <100.0%	\$137,764	\$ 37,523	0.70%	39.46%	27.24%	\$ 38,463

(a) Represents unscaled risk-weighted assets.

(b) Includes unfunded commitments without a specific PD range

Counterparty Credit Risk of Over the Counter (“OTC”) Derivative Contracts, Repo-Style Transactions and Eligible Margin Loans

Counterparty Credit Risk for Northern Trust primarily arises from OTC currency and interest rate derivatives and from indemnified securities lending transactions, which in turn are derived from a variety of funding, treasury, trading and custody-related activities.

Reporting and Measurement

To calculate exposure, Northern Trust treats repurchase agreements, reverse repurchase agreements and indemnified securities lending transactions as repo-style transactions. Foreign exchange exposures and interest rate derivatives are treated as OTC derivatives. The EAD measurement methodology for each eligible type of counterparty credit exposure, including the use of netting and collateral as risk mitigants, is determined based on operational requirements, the characteristics of the contract type and the portfolio size and complexity.

Repo-style Transactions

The Current Exposure Method with the Collateral Haircut Approach is used to estimate EAD for repurchase agreements and reverse repurchase agreements, whereby exposure amounts are summed with potential future exposure (price volatility) and then adjusted to account for collateral held as estimated using standard supervisory collateral haircuts. Repo-style transactions are not netted; EAD is estimated at the transaction level.

The Collateral Haircut Approach with standard supervisory haircuts is used to determine EAD for indemnified securities lending and indemnified repurchase transactions. For

Pillar 3 Regulatory Disclosures

certain U.S.-based counterparties, indemnified securities lending exposures are netted across principal lenders when aggregating exposures for the counterparty. As netting is not applicable for non-U.S.-based counterparties, those exposures are estimated for individual principal client lenders with activity to the given counterparty. Indemnified repo transactions are estimated at the principal client lender level and totaled for the counterparty as well.

OTC Derivatives

The Current Exposure Method is used to estimate EAD for OTC derivatives, whereby exposure amounts are summed (recognizing the benefit of eligible single product exposure netting arrangements for certain foreign exchange counterparties) with potential future exposure to derive the total counterparty exposure. Although collateral in the form of a lien on a client's financial assets custodied at Northern Trust often serves as collateral for OTC derivative transactions, the benefit of collateral is not taken into account in the EAD estimate for OTC derivative transactions.

Credit Limits

Credit exposure to counterparties is managed by use of a framework for setting limits by product type and exposure tenor.

Collateral Arrangements

To calculate a counterparty's net credit risk position, repo-style transactions and associated collateral are revalued on a daily basis. OTC interest rate and currency derivatives and associated collateral positions are also revalued on a daily basis, though no benefit for collateral is taken in the capital estimation for these products. Credit derivatives that are not subject to collateral requirements are revalued on a monthly basis.

Eligible collateral types are documented by a Credit Support Annex ("CSA") to an International Swaps and Derivatives Association ("ISDA") Master Agreement and are controlled under policies aimed at assuring the collateral agreed to be taken exhibits characteristics such as price transparency, price stability, liquidity, enforceability, independence and eligibility for regulatory purposes. Currently 100% of the collateral held by Northern Trust under CSAs is in the form of cash.

Collateral for Repo-Style Transactions

Northern Trust accepts the following as collateral for the below repo-style transactions:

Repurchase Agreements and Reverse Repurchase Agreements

- Cash;
- U.S. Government securities;
- U.S. Agency and GSE securities;
- Investment grade commercial paper and corporate bonds; and
- Equities listed in major indices, subject to stipulated diversification parameters.

Securities Lending Transactions

- Cash;
- Sovereign debt (includes debt issued by governments of highly-rated Organization for Economic Co-operation and Development (“OECD”) countries and corporate debt guaranteed by select highly-rated OECD governments that meet additional pre-agreed guidelines); and
- Equities listed in major indices, subject to stipulated diversification thresholds.

Based on its nominal loss experience to date, Northern Trust does not currently employ a credit risk valuation adjustment to incorporate creditworthiness within its estimate of the fair value of OTC derivative transactions. Any realized credit loss associated with OTC derivatives or repo-style transactions would be accounted for as a reduction of current earnings.

Wrong-way Risk

Wrong-way risk occurs when the exposure to a particular counterparty is positively correlated with the PD of the counterparty itself or where there is an adverse correlation between a counterparty’s PD and the mark-to-market value of the underlying transaction.

Northern Trust uses a range of tools to identify, control and monitor wrong-way risk. These include: the requirement to obtain prior approval before undertaking wrong-way risk transactions outside pre-agreed guidelines; exception reporting; collateral exclusion requirements; sovereign and issuer credit quality requirements for collateral accepted in repo-style transactions; approval of loan/collateral combinations based on historical quantitative correlation analysis; multi-factor stress testing scenarios to identify vulnerabilities and manage exposures against stressed exposure tolerances; and exposure reporting. Country limits and diversification parameters applicable to foreign exchange and credit default swap transactions, respectively, also limit wrong-way risk.

Potential Collateral Requirements

Certain ISDA agreements require a counterparty to post additional collateral in the event of a downgrade of its credit rating. Accordingly, Northern Trust regularly monitors its position with regard to counterparty credit ratings downgrades.

The following table describes Northern Trust's counterparty exposures by exposure type as of September 30, 2014.

Table 10: Counterparty Exposures

- Refer to Note 3 within Northern Trust's Third Quarter 2014 Form 10-Q for derivative contract exposure information.

<i>(\$ In Millions)</i>	As of September 30, 2014
Derivative Contracts	
EAD	\$ 3,806
Repo-Style Transactions	
Gross notional exposure	\$ 107,235
Cash and securities collateral	107,223
Net exposure	\$ 12
EAD	\$ 7,523

In the quarter ended September 30, 2014, Northern Trust has not purchased or sold any credit derivatives.

Credit Risk Mitigation

Northern Trust considers cash flow to be the primary source of repayment for client-related credit exposures. However, we do employ several different types of credit risk mitigants to manage our overall credit risk in the event cash flow is not sufficient to repay a credit exposure. Northern Trust has policies in place to ensure that credit risk mitigation is appropriately recognized, recorded and monitored. Recognition of credit risk mitigants in capital estimations is dependent upon the form of mitigation. Northern Trust broadly groups its risk mitigation techniques into four categories:

- Physical and Financial Collateral;
- Netting;
- Guarantees; and
- Credit Derivatives.

Physical and Financial Collateral

Liquidation of collateral that is securing credit risk exposures is considered in Northern Trust's LGD estimation. Residential and commercial real estate exposures are typically

secured by properly margined mortgages on the property. In cases where loans to commercial or certain Wealth Management clients are secured by marketable securities, the daily values of the securities are monitored closely to ensure adherence to collateral coverage policies. The frequency of collateral valuation increases commensurate with the volatility of the collateral's value.

Netting

On-balance sheet netting is employed on a limited basis. Netting is primarily related to foreign exchange transactions with major banks and institutional clients subject to eligible master netting agreements. A subset of these arrangements are conducted under a CSA. Northern Trust has elected to take the credit risk mitigation capital benefit of netting within its regulatory capital calculation at this time.

Guarantors

Personal and corporate guarantees are often taken to facilitate potential collection efforts and to protect Northern Trust's claims relative to other creditors. Northern Trust may also recognize "implied support," where the commitment provided is less than that of a legally enforceable guarantee, in its assignment of borrower PD as permitted under U.S. supervisory guidance. Northern Trust has elected not to take the credit risk mitigation capital benefit of guarantors within its regulatory capital calculation at this time.

Credit Derivatives

On a limited basis, Northern Trust enters into credit default swaps to reduce exposure concentrations with certain institutional borrowers. Northern Trust has elected not to take the credit risk mitigation capital benefit of credit derivatives within its regulatory capital calculation at this time.

Securitization

Northern Trust does not act as originator or sponsor for securitizations. In its investment portfolio, Northern Trust has purchased securities that meet the regulatory definition of a securitization. Additionally, Northern Trust has a limited number of commercial loan transactions that have been deemed to be securitizations for regulatory capital purposes. Northern Trust uses the Simplified Supervisory Formula Approach ("SSFA") to calculate risk-weighted assets for securitizations. If the SSFA cannot be applied due to data limitations, a 1250% risk-weight is applied to the exposure as required by current Basel guidelines.

Pillar 3 Regulatory Disclosures

The following table describes Northern Trust's securitization exposures as of September 30, 2014.

Table 11: Securitization Exposures

(\$ In Millions)	As of September 30, 2014	
	On-Balance Sheet	Off-Balance Sheet
Asset Backed Securities	\$ 2,311	\$ -
Mortgage Backed Securities	18	-
Loan Exposures	-	133
Total	\$ 2,329	\$ 133

The following table describes Northern Trust's securitization exposures by risk-weight bands as of September 30, 2014.

Table 12: Securitization Exposures by Risk-Weight Bands

(\$ In Millions)	As of September 30, 2014				
	Risk-Weight Bands	Approach	Asset Backed Securities	Mortgage Backed Securities	Loan Exposures
Securitizations	0% to <12%	SSFA	\$ -	\$ -	\$ -
	12% to <20%	SSFA	-	-	-
	20% to <50%	SSFA	1,645	2	108
	50% to <75%	SSFA	109	-	-
	75% to <100%	SSFA	277	-	25
	100% to <425%	SSFA	280	16	-
	425% to <1250%	SSFA	-	-	-
	1250%	1250%	-	-	-
Total			\$ 2,311	\$ 18	\$ 133

Independent Review and Verification

Independent oversight and review of the Credit Risk Framework is provided by Risk Control. Refer to Independent Review and Verification within the Risk Management Overview section for more information.

Equities Not Subject to the Market Risk Rule

Northern Trust's equity investments that are not subject to the Market Risk Rule are entered into to meet strategic business needs and for regulatory compliance purposes, rather than for generating capital gains.

- Refer to Note 3 within Northern Trust's Third Quarter 2014 Form 10-Q for discussion of valuation and accounting for equity holdings.

The following table presents the book and fair values and their associated risk-weight as of September 30, 2014, of Northern Trust's equity investments that are not subject to the Market Risk Rule:

Table 13: Equities Not Subject to the Market Risk Rule

(\$ In Millions)	As of September 30, 2014	
	Carrying Value	Fair Value
Non-publicly Traded	\$ 568	\$ 568
Publicly Traded	-	-
Total	\$ 568	\$ 568

(\$ In Millions)	As of September 30, 2014		
	Carrying Value	Risk-Weighted Asset Amount	Capital Requirement
Risk-Weights			
0%	\$ 54	\$ -	\$ -
20%	154	31	2
100%	311	311	25
400%	49	195	16
1250%	-	3	-
Total	\$ 568	\$ 540	\$ 43

During the three months ended September 30, 2014, there were no realized gains or losses from sales or liquidations, no unrealized gains or losses recognized on the balance sheet but not through earnings, and no latent revaluation gains or losses.

Operational Risk

Operational risk is the risk of loss from inadequate or failed internal processes, people and systems or from external events. Operational risk reflects the potential for inadequate information systems, operating problems, product design and delivery difficulties, or catastrophes to result in unexpected losses.

In providing services to its clients, Northern Trust is exposed to operational risk. The operational risk inherent in Northern Trust's businesses and corporate functions is affected by internal and external factors including, but not limited to, strategies, products, clients and geography. Operational risk includes compliance, fiduciary and legal risks.

Operational Risk Framework

Operational risk is addressed through the Operational Risk Framework. The Operational Risk Framework consists of risk management policies, programs and practices that are designed to keep the operational risk profile and losses within the risk appetite and guidelines included in the Corporate Risk Appetite Statement. The Operational Risk Framework is managed by the Operational Risk Management function and overseen by the Operational Risk Committee.

Northern Trust's operational risk management strategy is to:

- Align the Operational Risk Framework with evolving business and industry practice and with regulatory requirements;
- Identify, assess and mitigate risks inherent in business strategies;
- Promote risk awareness and foster a proactive risk management environment; and
- Report key topics and developments to senior governance bodies.

Operational risk is managed throughout the organization. Operational Risk Management officers report within the risk management organization led by the Chief Risk Officer. The Chief Operational Risk Officer oversees the Operational Risk Framework. The Head of Fiduciary Risk oversees the Corporate Fiduciary Risk Management policy. The Chief Compliance & Ethics Officer oversees the Compliance Framework. The Chief Information Security Officer oversees technology risk programs, and the Chief Risk Control Officer oversees Model Risk Management. Each of these risk officers works in conjunction with business unit and regional chief risk officers to oversee operational risk within the Corporation.

Operational Risk Mitigation

- Product and Process Risk Review is used for evaluating and managing risk associated with the introduction of new and modified non-credit products and services, significant changes to operating processes, and proposed business process outsourcing arrangements.
- Outsourcing Risk Management is a program that provides processes for appropriate risk assessment, measurement, monitoring and management of outsourced technology and business process outsourcing.
- Business Process Transition Risk Management is a program designed to effectively manage the risk associated with transitioning and migrating business processes to different geographic or jurisdictional locations within the organization.
- Metrics and Reporting is a process designed to aggregate, analyze and communicate measurable risk factors that most represent the operational risk environment of the Corporation.
- Model Risk Management provides governance and oversight in the identification and management of model risk.
- Technology Risk Management is a program that communicates and implements risk management processes and controls to address information security, technology and compliance risks within the Corporation.
- Significant New Business Opportunity is a program that assesses the resource requirements, impact on systems and controls, and other risk factors prior to taking on significant new business.
- Operational Concentration Risk Management is a program that provides an assessment of process concentrations within the Corporation.
- Fraud Prevention is a program that provides tools, advice, and guidance to Northern Trust's business units to help mitigate fraud risk.
- Business Continuity and Recovery Process is designed to protect life safety, minimize business impact and disruption, and support the recovery of mission critical functions for clients following a major disaster.

AMA Program and Quantification

Northern Trust uses the AMA capital quantification process to determine regulatory capital for operational risk. As discussed below, Northern Trust's capital quantification process incorporates the four required elements of the AMA approach:

- Internal loss data;
- External loss data;
- Business environment and internal control factors; and
- Scenario analysis data.

The result of the AMA quantification process is the measure of operational risk-weighted assets as disclosed in Table 4.

Northern Trust's Loss Event Data program collects loss data for use in monitoring operational risk exposure, various business analyses and AMA capital quantification. Data is reviewed to increase understanding of Northern Trust's and industry-wide operational risk exposure and to identify action plans to minimize or prevent future events. Both internal and external loss data are used in the operational risk capital quantification. The Corporation establishes thresholds that drive analysis, action and escalation through the business units and Operational Risk Management based on loss event data. Loss events that exceed designated thresholds may trigger a reassessment of the risks and controls within the impacted business unit or function.

Northern Trust's Risk and Control Self-Assessment ("RCSA") program is a structured risk management process used by the business units to analyze the risks that are present in their respective business environments, processes and activities and to assess the adequacy of associated internal controls.

Northern Trust's Operational Risk Scenario Analysis program is a systematic process of obtaining expert opinions from business managers and risk management experts to derive reasoned assessments of the likelihood of occurrence and the potential loss impact of plausible high-severity operational losses. Scenario analysis includes the use of external operational loss event data to inform the identification and estimation of scenario events. This practice facilitates management's consideration of operational risk to which the business is exposed and the potential impact and response to such events.

Northern Trust utilizes an AMA capital quantification process to estimate required capital for the Corporation and applicable U.S. banking subsidiaries. Northern Trust's AMA capital quantification process incorporates outputs from the Loss Event Data, RCSA and Operational Risk Scenario Analysis programs to derive required capital. Internal loss data are the foundation and the main influence factor for the capital quantification. External loss data inform the creation of scenario analysis data that are utilized in the capital quantification process. Business environment and internal control factors are used to estimate loss frequency and as an adjustment to capital estimates.

The AMA capital quantification process uses a Loss Distribution Approach methodology to combine frequency and severity distributions to arrive at an estimate of the potential aggregate loss at the 99.9th percentile over a one year time horizon.

Northern Trust employs a segmentation of data for the capital estimation process that complies with the regulatory requirement not to combine demonstrably different risk profiles in a segment and achieves the goal of creating meaningful risk measurements for the business. These segments fully cover the spectrum of operational risk exposure across all seven Basel event types:

- Business disruption and system failures;
- Clients, products and business practices;
- Damage to physical assets;
- Employee practices and workplace safety;
- Execution, delivery and process management;
- Internal fraud; and
- External fraud.

Northern Trust's use of insurance provides a transfer of some operational risk and may serve to reduce the monetary impact of certain operational loss events. However, the potential benefits of such insurance policies are not incorporated within the operational risk capital quantification process.

Independent Review and Verification

Independent oversight and review of the Operational Risk Framework is provided by Risk Control. Refer to Independent Review and Verification within the Risk Management Overview section for more information.

Market Risk

Market risk is the risk of movements in market prices impacting the values of assets or liabilities. Northern Trust's primary market risk results from changes in interest rates and, to a lesser degree, foreign currency exchange rates.

Market Risk Framework

To adhere to Northern Trust's market risk framework and policies, the Asset & Liability Management Policy Committee establishes and monitors guidelines, based on measures such as sensitivity of earnings ("SOE"), sensitivity of economic value of equity ("SEVE"), Value-at-Risk ("VaR") and notional position sizes.

All market risk activities are overseen by the Corporate Market Risk function, which is independent of the business units undertaking the activity. Exposure limits are set by the Board of Directors, and committee structures have been established to implement and monitor adherence to corporate policies, external regulations and established procedures.

Interest Rate Risk

Interest Rate Risk Management

Interest rate risk is the risk to earnings or capital due to changes in interest rates. Changes in interest rates can have a positive or negative impact on earnings depending on the positioning of assets, liabilities and off-balance sheet instruments. The impact to earnings will primarily come through net interest income, but it can also impact certain types of fees. Changes in interest rates also can impact the values of assets, liabilities and off-balance sheet positions, which indirectly impact the value of capital.

- Refer to page 47 of the MD&A within Northern Trust's 2013 Annual Report for discussion regarding the nature of interest rate risk and Northern Trust's techniques to monitor, manage and mitigate interest rate risk.

Simulation of Earnings

Simulation of earnings measures SOE under various interest rate scenarios.

- Refer to page 47 of the MD&A within Northern Trust's 2013 Annual Report for further information on Northern Trust's interest rate simulation of earnings and stress testing of interest rates.

Pillar 3 Regulatory Disclosures

The following table shows the estimated impact on the next twelve months of pre-tax earnings of 100 and 200 basis gradual point upward movements in interest rates relative to forward rates. Given the low level of interest rates, the simulation of earnings for rates 100 and 200 basis points lower would not provide meaningful results.

Table 14: Interest Rate Risk Simulation of Pre-Tax Earnings

(\$ In Millions)	As of September 30, 2014
	Increase (Decrease)
Increase in Interest Rates above Market Implied Forward Rates	Estimated Impact on Next Twelve Months of Pre-Tax Earnings
100 basis points	\$ 37
200 basis points	\$ 26

Simulation of Economic Value

A second technique used to measure interest rate risk is simulation of the economic value of equity, which measures SEVE to changes in interest rates.

- Refer to page 47 of the MD&A within Northern Trust's 2013 Annual Report for further information on Northern Trust's interest rate simulation of economic value of equity and stress testing of interest rates.

The following table shows the estimated impact on economic value of equity of 100 and 200 basis point shocks up from current interest rates. Given the low level of interest rates, the simulation of the economic value of equity for rates 100 or 200 basis points lower would not provide meaningful results.

Table 15: Interest Rate Risk Simulation of Economic Value of Equity

(\$ In Millions)	As of September 30, 2014
	Increase (Decrease)
Increase in Interest Rates above Market Implied Forward Rates	Estimated Impact on Economic Value of Equity
100 basis points	\$ (71)
200 basis points	\$ (380)

Trading Risk

Trading risk arises from providing foreign exchange, securities brokerage and interest rate derivatives services to client. Securities and derivatives activities are limited and their trading risks are de minimus.

Foreign Currency Risk

Foreign Currency Risk Management

Foreign exchange trading activities consist principally of providing foreign exchange services to clients. Most of those services are provided in connection with Northern Trust's global custody business. Foreign currency trading positions exist when aggregate obligations to purchase and sell a currency other than the U.S. dollar either do not offset each other in amount, or offset each other over different time periods.

- Refer to page 49 of the MD&A within Northern Trust's 2013 Annual Report for discussion regarding the nature of foreign currency risk and Northern Trust's techniques to monitor, manage and mitigate foreign currency risk.

Foreign Currency VaR Modeling

Foreign currency value-at-risk ("VaR") measures are computed in a vended software application which downloads foreign exchange positions from Northern Trust's trading systems each day. Data vendors provide foreign exchange rates and interest rates for all currencies. Corporate Market Risk monitors VaR model inputs and outputs for reasonableness on a daily basis.

VaR Modeling Variations and Reporting

Northern Trust monitors a portfolio of the foreign currency VaR measures to meet specific regulatory and internal management needs. The portfolio includes different methodologies (historical, variance-covariance and Monte Carlo), equally-weighted and exponentially-weighted volatilities, horizons of one day and ten days, confidence levels ranging from 95% to 99.95% and look back periods of one year and four years. These alternative measures provide a wide array of alternative risk metrics, offering corroborating measures and useful perspectives on Northern Trust's market risks.

Automated daily reports are produced and distributed to business unit managers and risk managers. Corporate Market Risk also reviews and reports several variations of the VaR measures in historical time series format to provide management with a historical perspective on risk.

The table below presents the levels of total regulatory VaR and its subcomponents for global foreign currency in the quarters indicated below, based on the historical simulation methodology, a 99% confidence level, a one day horizon and equally weighted volatility. The total VaR for foreign currency is typically less than the sum of its two components due to diversification benefits derived from the two subcomponents.

Table 16: Foreign Currency Value-at-Risk

(\$ In Millions)						
	Total VaR (Spot and Forward)		FX Spot VaR		FX Forward VaR	
	September 30, 2014	June 30, 2014	September 30, 2014	June 30, 2014	September 30, 2014	June 30, 2014
High	\$ 0.5	\$ 0.7	\$ 0.5	\$ 0.7	\$ 0.2	\$ 0.1
Low	0.1	0.1	0.1	-	0.1	-
Average	0.2	0.4	0.2	0.3	0.1	0.1
Quarter End	0.4	0.3	0.4	0.3	0.1	0.1

Stressed VaR Reporting

The table below presents levels of Stressed Value-at-Risk (“SVaR”) for foreign currency based on the same assumptions and inputs as above but replaying the severe one year financial crisis period of August 2008 to August 2009.

Table 17: Foreign Currency Stressed Value-at-Risk

(\$ In Millions)		
	Stressed VaR 99% 1-day	
	September 30, 2014	June 30, 2014
High	\$ 2.7	\$ 2.3
Low	0.6	1.7
Average	1.4	1.4
Quarter End	1.2	1.1

During the most recent period presented, Northern Trust incurred no daily trading losses.

- Refer to page 49 of the MD&A within Northern Trust’s 2013 Annual Report for further information regarding VaR and SVaR.

Valuation Practices

Northern Trust updates interest rates, foreign exchange rates and security prices daily through automated data feeds from internal source systems and established data vendors. Rates and prices are fed into pricing models which use standard methodologies to determine initial and theoretical mark-to-market valuations of positions. Those valuations serve as base market levels from which the VaR and stress test models calculate potential changes in values. Theoretical mark-to-market valuations prepared for risk management purposes may differ from valuations prepared in accordance with GAAP.

Foreign exchange positions do not include any options that require valuation. Volatility values are updated for daily valuation of any caps, floors, swaptions or swaps with

Pillar 3 Regulatory Disclosures

embedded options in the interest rate derivatives portfolio. Market prices for securities in Northern Trust's broker-dealer's inventory, including any that might have embedded options, are updated daily.

Risk management and operations staff provide independent assessment of valuation inputs, processes and outputs for accuracy within approved thresholds and determine any valuation adjustments that may be required.

Other Trading Activities

- Refer to page 50 of the MD&A within Northern Trust's 2013 Annual Report for discussion regarding market risk associated with other trading activities.

Economic Capital Methodology for Market Risk (Trading Book)

Assessments of economic capital requirements for risks associated with foreign exchange trading are calculated based on daily VaR measures. At September 30, 2014, global foreign exchange comprised approximately 76% of the trading book economic capital and the brokerage inventory held by Northern Trust's broker-dealer, Northern Trust Securities, Inc., comprised approximately 24%. The drivers of risk for global foreign exchange are interest rates and foreign exchange rates; the driver of risk for the brokerage inventory is interest rates.

Stress Tests

Northern Trust monitors stress test results on an ongoing basis to assess the potential for exceeding the base economic capital value described above. Northern Trust runs a number of stress tests on the foreign exchange portfolio, including quadrupling volatility, measuring at an extreme number of standard deviations, stressing correlations to extremes, taking tail averages (conditional VaR or expected shortfall), zero diversification benefit and zero correlation between spot and forward risks. Northern Trust runs daily a stressed VaR, which replays a severe one year period from the 2008-2009 financial crisis. In assessing capital adequacy, Northern Trust considers in particular the results of stress tests run weekly that reenact eight of the most severe historical events over a simulated ten day period.

Independent Review and Verification

Independent oversight and review of the Market Risk Framework is provided by Risk Control. Refer to Independent Review and Verification within the Risk Management Overview section for more information.

Pillar 3 Regulatory Disclosures

References to Northern Trust's SEC Filings

Northern Trust's SEC filings contain important information relative to this report. Specific references are listed below.

DISCLOSURE MAP

Pillar 3 Requirement	Description	Pillar 3 Report	Q3 2014	2013	2013
			Form 10-Q	Annual Report	Form 10-K
		Disclosure Starts on Page Number			
Introduction	Basis of presentation	4		60	
Capital Structure	Terms and conditions of capital instruments	10		88	
	Restrictions on transactions between the Corporation and its subsidiaries	12		111	12
Risk Management Overview	Liquidity Risk Management	14		32	
	Risk Management Processes	14		39	
Credit Risk: general disclosures	Loans and leases	20	48	40	
	Allowance for credit losses	20	56	27, 45	
	Industries	22		42	
Counterparty Credit Risk of OTC Derivative Contracts, Repo-Style Transactions and Eligible Margin Loans	Derivative contract exposures	28	36		
Equities Not Subject to the Market Risk Rule	Valuation and accounting	31	39		
Market Risk: Interest Rate	Nature of risk	36		47	
	Monitor, manage and mitigate risk techniques	36		47	
	Simulation of earnings	36		47	
	Stress testing	36, 37		47	
	Simulation of economic value	37		47	
Market Risk: Foreign Currency	Nature of risk	38		49	
	Monitor, manage and mitigate risk techniques	38		49	
	VaR and SVaR	39		49	
	Other trading activities	40		50	