

The Northern Trust Company, Canada
Basel III Pillar III Disclosure
September 30, 2019

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THE NORTHERN TRUST COMPANY, CANADA OVERVIEW & SCOPE OF APPLICATION

This document presents the capital structure and capital adequacy calculations of The Northern Trust Company, Canada (TNTCC) based on guidelines published by the Basel Committee on Banking Supervision (Basel) and the Office of the Superintendent of Financial Institutions (OSFI). TNTCC complies with the Basel III framework as it applies:

- Pillar 1: Minimum Capital Requirements. TNTCC has adopted the Standardized Approach to Credit Risk and the Basic Indicator Approach to Operational Risk to determine the company's capital requirements under Basel Capital Adequacy Reporting (BCAR);
- Pillar 2: The Supervisory Review Process. TNTCC completes an Internal Capital Adequacy Assessment Process (ICAAP) annually, with the results reviewed and approved by TNTCC's Board of Directors; and
- Pillar 3: Market Discipline. This Pillar 3 disclosure document provides information on TNTCC's risk management objectives and policies, its capital position, its approach to assessing the adequacy of its capital and its exposure to material risks.

TNTCC was, by Letters Patent of Continuance, continued as a trust company under the *Trust and Loan Companies Act* (Canada) in July 1993 and OSFI issued an order approving TNTCC to commence and carry out trust business in January 1994. TNTCC is a wholly owned subsidiary of The Northern Trust Company (TNTC), a corporation organised under the banking laws of the State of Illinois, United States of America. Northern Trust Corporation (NTC), a financial holding company based in Chicago, is the ultimate parent of TNTC. TNTCC is not considered a Domestic-systemically important bank by OSFI.

NTC's business activities in Canada are comprised of global custody and associated services, securities lending, asset management and fund administration services. These services are delivered through three regulated Canadian entities: TNTCC, the Canada Branch of TNTC (Canada Branch) and NT Global Advisors, Inc. (NTGA Canada).

To ensure that TNTCC maintains sufficient regulatory capital and liquidity at all times, TNTCC has adopted a Capital and Liquidity Management Policy (CLM Policy) and manages its assets and liabilities in accordance with criteria set forth in its Asset and Liability Management Policy (ALM Policy). These two policies provide the basis for TNTCC's credit and liquidity risk management and guidelines to govern the investment in securities and money market assets.

TNTCC currently does not hold any client deposits or engage in any activities that result in off-balance sheet exposures. Accordingly, its capital and liquidity requirements are stable and predictable.

Northern Trust Risk Management

TNTC has established an integrated Enterprise Risk Management Framework (ERM) that provides for consistent risk management practices throughout the organization, including TNTCC, and acts as a reference of how various components are defined, aligned and linked to capital adequacy. It allows for active management of risk in conjunction with defined risk appetites.

TNTCC's risk appetite is low to moderate and its attitude toward risk is best described as judicious, with an objective of long-term stability. TNTCC's very strong capital base and liquid balance sheet enable it to pursue strategic growth opportunities and manage unexpected events. Risk is effectively managed by a comprehensive risk management program which involves related Northern Trust entities, as required.

This report is unaudited and the amounts are presented in Thousands of Canadian Dollars, unless otherwise disclosed. Financial results are prepared in accordance with International Financial Reporting Standards (IFRS).

LOCATION AND FREQUENCY OF DISCLOSURE

This quarterly disclosure is posted and publicly available on Northern Trust's website (www.northerntrust.com).

CAPITAL STRUCTURE

The capital structure of TNTCC consists of Common Shares and Retained Earnings. TNTCC has authorized an unlimited number of common shares without par value. As at September 30, 2019, TNTCC had 30,000 common shares issued fully paid and outstanding.

Table 1 - Capital Structure

The table below provides a breakdown of TNTCC's capital structure:

	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019
Tier 1 Capital					
Share Capital	30,000	30,000	30,000	30,000	30,000
Retained Earnings	30,050	31,325	32,446	33,501	34,851
Total Tier 1 Capital¹	60,050	61,325	62,446	63,501	64,851
Total Capital	60,050	61,325	62,446	63,501	64,851

1. All capital held by TNTCC is Tier 1 Capital

CAPITAL ADEQUACY

TNTCC has a thorough process to assess capital adequacy built around an internal view of its risk profile and a comprehensive capital planning process.

Projections of regulatory and internal capital requirements and available capital are compared to assess TNTCC's capital adequacy over a multi-year time period. Having a clear understanding of regulatory and internal capital requirements, as well as available capital levels, under different circumstances is an important component of an entity's capital adequacy assessment. TNTCC's capital adequacy is assessed quarterly and is based on the CLM Policy and the Capital Management Guideline (CMG), both of which were approved by the Board of Directors.

Table 2 - Modified Capital Disclosure Template ¹

The table below represents the modified capital disclosure template for Non-domestic-systemically important banks (Non-D-SIBs):

	Q3 2018 ²	Q4 2018 ²	Q1 2019 ²	Q2 2019 ²	Q3 2019 ²
Common Equity Tier 1 capital: instruments and reserves					
1 Directly issued qualifying common share capital (and equivalent for non-joint stock companies) plus related stock surplus	30,000	30,000	30,000	30,000	30,000
2 Retained earnings	30,050	31,325	32,446	33,501	34,851
6 Common Equity Tier 1 capital before regulatory adjustments	60,050	61,325	62,446	63,501	64,851
28 Total regulatory adjustments to Common Equity Tier 1	-	-	-	-	-
29 Common Equity Tier 1 capital (CET1)	60,050	61,325	62,446	63,501	64,851
36 Additional Tier 1 capital before regulatory adjustments	-	-	-	-	-
44 Additional Tier 1 capital (AT1)	-	-	-	-	-
45 Tier 1 capital (T1 = CET1 + AT1)	60,050	61,325	62,446	63,501	64,851
58 Tier 2 capital (T2)	-	-	-	-	-
59 Total capital (TC = T1 + T2)	60,050	61,325	62,446	63,501	64,851
60 Total risk-weighted assets²	35,441	35,148	36,749	37,607	38,138
Capital ratios					
61 Common Equity Tier 1 (as a percentage of risk weighted assets)	169.44%	174.48%	169.93%	168.85%	170.05%
62 Tier 1 (as a percentage of risk weighted assets)	169.44%	174.48%	169.93%	168.85%	170.05%
63 Total capital (as a percentage of risk weighted assets)	169.44%	174.48%	169.93%	168.85%	170.05%
OSFI target					
69 Common Equity Tier 1 capital target ratio	7.0%	7.0%	7.0%	7.0%	7.0%
70 Tier 1 capital target ratio	8.5%	8.5%	8.5%	8.5%	8.5%
71 Total capital target ratio	10.5%	10.5%	10.5%	10.5%	10.5%

1. Numbering in the above table corresponds to the OSFI prescribed template for non-D-SIBs included in the May 2018 Capital Disclosure Requirements Guideline
2. See Table 3 – Risk-weighted Assets

Table 3 – Risk-weighted Assets

The Pillar III capital requirements of TNTCC for credit and operational risk are provided in the following table:

	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019
Capital Requirements for Credit Risk					
Deposits with Regulated Financial Institutions	4,510	6,344	5,463	6,487	8,808
Risk Weighted - Deposits with Regulated Financial Institutions (20%)	902	1,269	1,093	1,297	1,762
Government Securities	51,173	52,011	52,754	51,958	50,256
Risk Weighted - Government Securities (0%)	-	-	-	-	-
Other Assets	6,677	5,654	7,205	7,720	7,949
Risk Weighted - Other Assets (100% - 250%)	6,689	5,666	7,231	7,747	8,038
Total Risk Weighted Assets for Credit Risk	7,591	6,935	8,324	9,044	9,800
Capital Requirements for Operational Risk					
Average three year gross income	14,854	15,045	15,162	15,233	15,116
Capital Charge (15%)	2,228	2,257	2,274	2,285	2,267
Risk Weighted assets for Operational Risk (12.5 times Capital Charge)	27,850	28,213	28,425	28,563	28,338
Total Risk Weighted Assets	35,441	35,148	36,749	37,607	38,138

Table 4 – Leverage Ratio ¹

The table below represents the leverage ratio common disclosure:

	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019
On-balance sheet exposures					
1 On-balance sheet items (excluding derivatives, SFTs and grandfathered securitization exposures but including collateral)	62,360	64,009	65,422	66,165	67,013
2 (Asset amounts deducted in determining Basel III Tier 1 capital)	-	-	-	-	-
3 Total on-balance sheet exposures (excluding derivatives and SFTs)	62,360	64,009	65,422	66,165	67,013
Capital and Total Exposures					
20 Tier 1 capital	60,050	61,325	62,446	63,501	64,851
21 Total Exposures	62,360	64,009	65,422	66,165	67,013
Leverage Ratios					
22 Basel III leverage ratio ²	96.30%	95.81%	95.45%	95.97%	96.77%

1. Numbering in the above table corresponds to the OSFI prescribed template

Liquidity Coverage Ratio

Per OSFI's Liquidity Adequacy Requirements (LAR) Guideline, TNTCC is required to maintain a liquidity coverage ratio (LCR) with a value no lower than 100%. TNTCC's LCR exceeded this minimum requirement as at all the quarter ends reported herein.

CREDIT RISK

Credit risk is the risk to earnings and/or capital arising from the failure of a borrower or counterparty to perform on an obligation.

The primary sources of credit risk for TNTCC derive from issuer risk (as it pertains to Canadian government securities), counterparty risk (as it pertains to bank deposits and client fee receivables) and concentration risk (as it pertains to concentrated exposure to Canadian sovereign debts).

The credit risk management process is documented in the ALM Policy. Central to this process is approval and monitoring of exposures. The nature of TNTCC's business is not to provide traditional commercial credit; it is not part of TNTCC's business plan to have a portfolio of loans. TNTCC credit risk exposure is substantively limited to Canada.

Given TNTCC's business focus, counterparties, product offerings and the extremely low risk nature of its investment holdings (Government of Canada or provincial government securities), TNTCC's exposures to credit risk are not significant.

Table 5 - Investment Contractual Maturity Breakdown

A breakdown of TNTCC's contractual maturity is provided in the table below:

	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019
Bank Deposits					
Demand	4,510	6,344	5,463	6,487	8,808
Securities					
Up to 3 months	15,566	14,495	13,470	24,435	12,452
Between 3 months to 6 months	14,437	13,413	11,890	12,390	15,203
Between 6 months to 1 year	21,170	24,103	27,394	15,133	-
Between 3 years to 4 years	-	-	-	-	22,601
Total	55,683	58,355	58,217	58,445	59,064

EXPOSURES RELATED TO COUNTERPARTY CREDIT RISK

For TNTCC, counterparty risk pertains to deposits maintained with a Canadian Chartered Bank (as nostro bank agent) and client fee receivables.

Northern Trust Corporation (NTC's) Sub-custodian Oversight Committee is charged with evaluating proposals for the appointment or replacement of nostro bank agents for use by NTC legal entities. Upon review by the Sub-custodian Oversight Committee, TNTC's Capital Markets Credit Committee is ultimately responsible for approving all such appointments and replacements.

TNTCC utilizes the credit ratings from Standard and Poor's (S&P) for purposes of determining its capital adequacy.

Client fee receivables, including aging of such receivables, are reviewed on a monthly basis and are followed up as required.

The credit valuation adjustment (CVA) is an adjustment to the mid-market valuation of the trading portfolio due to the risk of losses associated with deterioration in the credit risk of the counterparty. Given the nature of TNTCC's operations a CVA capital charge is not required.

Table 6 - Credit Exposure by Counterparty Type

A breakdown of TNTCC's credit risk exposure by asset class is provided in the table below:

	Q3 2018			Q4 2018			Q1 2019			Q2 2019			Q3 2019		
	Exposure (Gross)	Exposure (Net)	RWA	Exposure (Gross)	Exposure (Net)	RWA	Exposure (Gross)	Exposure (Net)	RWA	Exposure (Gross)	Exposure (Net)	RWA	Exposure (Gross)	Exposure (Net)	RWA
Sovereign ¹	51,173	51,173	-	52,011	52,011	-	52,754	52,754	-	51,958	51,958	-	50,256	50,256	-
Bank ²	4,510	4,510	902	6,344	6,344	1,269	5,463	5,463	1,093	6,487	6,487	1,297	8,808	8,808	1,762
Other assets ³	6,677	6,677	6,689	5,654	5,654	5,666	7,205	7,205	7,231	7,720	7,720	7,747	7,949	7,949	8,038
Total	62,360	62,360	7,591	64,009	64,009	6,935	65,422	65,422	8,324	66,165	66,165	9,044	67,013	67,013	9,800

1. This asset class covers all exposures to counterparties treated as sovereigns under the standardized approach
2. This asset class covers exposures to banks
3. This asset class includes client receivables

In January 2018, TNTCC adopted IFRS 9, Financial Instruments, on a retrospective basis. IFRS 9 includes an expected credit loss model for calculating impairment of financial assets. The methodology to recognize expected credit losses considers whether there has been a significant increase in credit risk exposures since the initial recognition of such financial assets. In measuring the expected credit loss, TNTCC considers reasonable and supportable information that is available without undue cost or effort and includes quantitative and qualitative information with a forward-looking analysis.

MARKET RISK AND LIQUIDITY RISK

Market risk results primarily from the sensitivity of the value of assets and liabilities, as well as the sensitivity of net interest income, to changes in interest rates. Secondly, market risk results from changes in the value of trading positions due to movements in market prices, foreign exchange rates and interest rates.

Market & Liquidity risk is comprised of three sub-risks:

- Trading risk - risk of loss in trading positions from changes in the value of the trading position
- Interest rate risk - risk of loss due to significant unexpected changes in interest rates
- Liquidity funding risk - risk of loss due to the inability to raise capital to meet business needs

TNTCC engages in no trading activity and therefore is not required to hold any capital in relation to market risk.

Liquidity funding is not required to meet contractual liabilities as TNTCC does not hold any client deposits. Sufficient cash is maintained at all times to meet business and operational requirements. Core investments are held in Government of Canada treasury bills and provincial government

securities which are considered liquid assets given their short maturities or ready marketability. TNTCC manages its liquidity risk through the monitoring and escalation process stipulated in the ALM Policy.

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 that result in unexpected servicing losses. TNTCC uses the basic indicator approach to measure operational risk. The risk-weighted assets relating to operational risk are included in Table 3.

All operational activities are outsourced to the Canada Branch and are carried out by the employees of the Canada Branch or TNTC. The Canada Branch has adopted an operational risk framework which outlines its operational risk management strategy, programs and practices. TNTCC does have moderate inherent operational risk which includes the oversight of the outsourced operations. Employment Practices and Workplace Safety risk is limited to the directors of TNTCC as applicable.

INTEREST RATE RISK IN THE BANKING BOOK

Interest rate risk is the risk of loss due to significant unexpected changes in interest rates. TNTCC measures interest rate risk based on maturity matching review on a quarterly basis and sensitivity analysis (assuming movement in interest rates of 200 basis points in both directions) on an annual basis.

TNTCC's ALM Policy governs activities related to interest rate sensitivity, liquidity, the pledging of assets and counterparty exposure/concentration limits. The balance sheet structure of TNTCC is interest sensitive because its interest bearing assets are exposed to changes in interest rates but its sole source of funding, equity capital, is not. Accordingly, the measures of interest rate sensitivity are largely limited to the impact on interest income based the terms of fixed rate securities held and as such TNTCC's exposure to interest rate risk is very low from a loss perspective.

TNTCC's investment assets are held to maturity to meet one or more of the following objectives: provide interest income, manage interest rate risk, comply with applicable regulatory requirements and ensure adequate liquidity. Pursuant to the ALM Policy, TNTCC will invest in instruments that are assigned a credit risk weighing of 20% or lower in the capital ratio calculation, including claims on the Government of Canada, provincial or territorial governments to a maturity of 5 years and deposits with Canadian banks to a maturity of 12 months. As at September 30, 2019, TNTCC's investment assets were in line with the ALM Policy.