

The Northern Trust Company, Canada
Basel III Pillar III Disclosure
December 31, 2022

January 27, 2023

CONTENTS

THE NORTHERN TRUST COMPANY, CANADA OVERVIEW AND SCOPE OF APPPLICATION	3
LOCATION AND FREQUENCY OF DISCLOSURE	4
CAPITAL STRUCTURE	5
CAPITAL ADEQUACY	5
CREDIT RISK	8
EXPOSURES RELATED TO COUNTERPARTY CREDIT RISK	9
MARKET RISK AND LIQUIDITY RISK	10
OPERATIONAL RISK	11
INTEREST RATE RISK IN THE BANKING BOOK.....	11

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 and Liquidity 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: Prudential and Risk Management Expectations and the Supervisory Oversight 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: Public Disclosure – 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 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, Illinois, is the ultimate parent of TNTC. TNTCC is not a Domestic-systemically important bank.

NTC’s business activities in Canada revolve around asset servicing for institutional investors and include global custody, benefit payments, risk and performance management, 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), an authorized foreign bank branch under the *Bank Act (Canada)*, and NT Global Advisors, Inc. (NTGA Canada).

TNTCC has adopted a Capital and Liquidity Management Policy (CLM Policy) to ensure that it always maintains sufficient regulatory capital and liquidity, and manages its assets and liabilities in accordance with the Asset and Liability Management Policy (ALM Policy). These two policies provide the basis for TNTCC’s capital and liquidity risk management and the guideline to govern TNTCC’s investments.

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 Risk Management Framework (RM Framework) 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 and liquidity adequacy. Underpinning the RM Framework are governance bodies, policies, processes, systems and controls embedded across the lines of defence to support strategy, understand risks, inform decisions and manage risks within risk appetites and applicable laws and regulations. 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 and third-party service providers, 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 December 31, 2022, 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:

	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022
Tier 1 Capital					
Share Capital	30,000	30,000	30,000	30,000	30,000
Retained Earnings	42,908	43,702	44,666	45,576	45,451
Total Tier 1 Capital¹	72,908	73,702	74,666	75,576	75,451
Total Capital	72,908	73,702	74,666	75,576	75,451

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):

	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022
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	42,908	43,702	44,666	45,576	45,451
6 Common Equity Tier 1 capital before regulatory adjustments	72,908	73,702	74,666	75,576	75,451
28 Total regulatory adjustments to Common Equity Tier 1	-	-	-	-	-
29 Common Equity Tier 1 capital (CET1)	72,908	73,702	74,666	75,576	75,451
36 Additional Tier 1 capital before regulatory adjustments	-	-	-	-	-
44 Additional Tier 1 capital (AT1)	-	-	-	-	-
45 Tier 1 capital (T1 = CET1 + AT1)	72,908	73,702	74,666	75,576	75,451
58 Tier 2 capital (T2)	-	-	-	-	-
59 Total capital (TC = T1 + T2)	72,908	73,702	74,666	75,576	75,451
60 Total risk-weighted assets²	40,913	41,093	41,677	41,020	41,399
Capital ratios					
61 Common Equity Tier 1 (as a percentage of risk weighted assets)	178.20%	179.35%	179.15%	184.24%	182.25%
62 Tier 1 (as a percentage of risk weighted assets)	178.20%	179.35%	179.15%	184.24%	182.25%
63 Total capital (as a percentage of risk weighted assets)	178.20%	179.35%	179.15%	184.24%	182.25%
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:

	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022
Capital Requirements for Credit Risk					
Deposits with Regulated Financial Institutions	7,671	9,216	9,402	12,302	13,587
Risk Weighted - Deposits with Regulated Financial Institutions (20%)	1,534	1,843	1,880	2,460	2,717
Government Securities	59,209	59,063	58,869	58,904	58,391
Risk Weighted - Government Securities (0%)	-	-	-	-	-
Other Assets	8,991	8,794	9,219	7,612	7,988
Risk Weighted - Other Assets (100% - 250%)	9,066	8,875	9,347	7,797	8,182
Total Risk Weighted Assets for Credit Risk	10,600	10,718	11,227	10,257	10,899
Capital Requirements for Operational Risk					
Average three year gross income	16,168	16,203	16,237	16,409	16,265
Capital Charge (15%)	2,425	2,430	2,436	2,461	2,440
Risk Weighted assets for Operational Risk (12.5 times Capital Charge)	30,313	30,375	30,450	30,763	30,500
Total Risk Weighted Assets	40,913	41,093	41,677	41,020	41,399

Table 4 – Leverage Ratio ¹

The table below represents the leverage ratio common disclosure:

	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022
On-balance sheet exposures					
1 On-balance sheet items (excluding derivatives, SFTs and grandfathered securitization exposures but including collateral)	75,871	77,073	77,490	78,818	79,966
2 (Asset amounts deducted in determining Basel III Tier 1 capital)	-	-	-	-	-
3 Total on-balance sheet exposures (excluding derivatives and SFTs)	75,871	77,073	77,490	78,818	79,966
Capital and Total Exposures					
20 Tier 1 capital	72,908	73,702	74,666	75,576	75,451
21 Total Exposures	75,871	77,073	77,490	78,818	79,966
Leverage Ratios					
22 Basel III leverage ratio ²	96.09%	95.63%	96.36%	95.89%	94.35%

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 are issuer risk (as it pertains to Canadian and provincial government securities), counterparty risk (as it pertains to bank deposits and client fees receivable) 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 and provincial government securities), TNTCC's exposure to credit risk is not significant.

Table 5 - Investment Contractual Maturity Breakdown

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

EXPOSURES RELATED TO COUNTERPARTY CREDIT RISK

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

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

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.

Client fees receivable are reviewed monthly and balances past due are followed up. Expected credit loss allowances on aged amounts are updated quarterly.

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.

	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022
Bank Deposits					
Demand	7,671	9,216	9,402	12,302	13,587
Securities					
Up to 3 months	8,998	7,998	-	7,199	8,982
Between 3 months to 6 months	7,994	-	14,879	7,700	35,035
Between 6 months to 1 year	14,838	23,757	44,005	8,954	14,374
Between 1 year to 3 years	27,379	27,308	-	35,050	-
Total	66,880	68,279	68,286	71,205	71,978

Table 6 - Credit Exposure by Counterparty Type

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

	Q4 2021			Q1 2022			Q2 2022			Q3 2022			Q4 2022		
	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	59,209	59,209	-	59,063	59,063	-	58,869	58,869	-	58,904	58,904	-	58,391	58,391	-
Bank ²	7,671	7,671	1,534	9,216	9,216	1,843	9,402	9,402	1,880	12,302	12,302	2,460	13,587	13,587	2,717
Other assets ³	8,991	8,991	9,066	8,794	8,794	8,875	9,219	9,219	9,347	7,612	7,612	7,797	7,988	7,988	8,182
Total	75,871	75,871	10,600	77,073	77,073	10,718	77,490	77,490	11,227	78,818	78,818	10,257	79,966	79,966	10,899

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 fees receivable

Since January 2018, TNTCC has adopted IFRS 9, Financial Instruments. IFRS 9 includes an expected credit loss model for determining 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 value
- 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 is not engaged in trading and therefore not required to hold capital in relation to market risk.

TNTCC maintains sufficient cash at all times to meet its business and operational requirements. Liquidity funding is not required to meet contractual liabilities as TNTCC does not hold any client deposits. 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 is the potential that inadequate information systems, operating problems, product design and delivery difficulties, potential legal actions, or catastrophes will result in losses. This includes the potential that continuity of service and resiliency may be impacted. Operational risk includes compliance and fiduciary risks, which under NTC's risk structure are governed and managed explicitly. 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. NTC has implemented an Operational Risk Management Policy (ORM Policy) which is deployed globally across all business units and entities, including TNTCC and the Canada Branch (collectively, NTC Canada). The Policy sets forth the principles and general governance that govern the management of operational risk of Northern Trust. NTC Canada has implemented a Canadian Addendum which supplements NTC's ORM Policy to better align it with how NTC Canada manages its operational risk management responsibilities in accordance with the Canadian regulatory requirements. TNTCC does have moderate inherent operational risk relating to oversight of the outsourced operations. Employment Practices and Workplace Safety risk is limited to TNTCC directors and officers 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 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 December 31, 2022, TNTCC's investment assets were in compliance with the ALM Policy.