

The Northern Trust Company, Canada
Basel III Pillar III Disclosure
March 31, 2020

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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 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 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), an authorized foreign bank branch under the Bank Act (Canada), 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 capital 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 and liquidity 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 March 31, 2020, 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:

	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020
Tier 1 Capital					
Share Capital	30,000	30,000	30,000	30,000	30,000
Retained Earnings	32,446	33,501	34,851	36,044	37,390
Total Tier 1 Capital¹	62,446	63,501	64,851	66,044	67,390
Total Capital	62,446	63,501	64,851	66,044	67,390

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):

	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020
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	32,446	33,501	34,851	36,044	37,390
6 Common Equity Tier 1 capital before regulatory adjustments	62,446	63,501	64,851	66,044	67,390
28 Total regulatory adjustments to Common Equity Tier 1	-	-	-	-	-
29 Common Equity Tier 1 capital (CET1)	62,446	63,501	64,851	66,044	67,390
36 Additional Tier 1 capital before regulatory adjustments	-	-	-	-	-
44 Additional Tier 1 capital (AT1)	-	-	-	-	-
45 Tier 1 capital (T1 = CET1 + AT1)	62,446	63,501	64,851	66,044	67,390
58 Tier 2 capital (T2)	-	-	-	-	-
59 Total capital (TC = T1 + T2)	62,446	63,501	64,851	66,044	67,390
60 Total risk-weighted assets²	36,749	37,607	38,138	36,460	39,111
Capital ratios					
61 Common Equity Tier 1 (as a percentage of risk weighted assets)	169.93%	168.85%	170.05%	181.14%	172.30%
62 Tier 1 (as a percentage of risk weighted assets)	169.93%	168.85%	170.05%	181.14%	172.30%
63 Total capital (as a percentage of risk weighted assets)	169.93%	168.85%	170.05%	181.14%	172.30%
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:

	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020
Capital Requirements for Credit Risk					
Deposits with Regulated Financial Institutions	5,463	6,487	8,808	6,028	2,916
Risk Weighted - Deposits with Regulated Financial Institutions (20%)	1,093	1,297	1,762	1,206	583
Government Securities	52,754	51,958	50,256	56,783	59,055
Risk Weighted - Government Securities (0%)	-	-	-	-	-
Other Assets	7,205	7,720	7,949	6,705	9,335
Risk Weighted - Other Assets (100% - 250%)	7,231	7,747	8,038	6,741	9,390
Total Risk Weighted Assets for Credit Risk	8,324	9,044	9,800	7,947	9,973
Capital Requirements for Operational Risk					
Average three year gross income	15,162	15,233	15,116	15,209	15,540
Capital Charge (15%)	2,274	2,285	2,267	2,281	2,331
Risk Weighted assets for Operational Risk (12.5 times Capital Charge)	28,425	28,563	28,338	28,513	29,138
Total Risk Weighted Assets	36,749	37,607	38,138	36,460	39,111

Table 4 – Leverage Ratio ¹

The table below represents the leverage ratio common disclosure:

	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020
On-balance sheet exposures					
1 On-balance sheet items (excluding derivatives, SFTs and grandfathered securitization exposures but including collateral)	65,422	66,165	67,013	69,516	71,306
2 (Asset amounts deducted in determining Basel III Tier 1 capital)	-	-	-	-	-
3 Total on-balance sheet exposures (excluding derivatives and SFTs)	65,422	66,165	67,013	69,516	71,306
Capital and Total Exposures					
20 Tier 1 capital	62,446	63,501	64,851	66,044	67,390
21 Total Exposures	65,422	66,165	67,013	69,516	71,306
Leverage Ratios					
22 Basel III leverage ratio ²	95.45%	95.97%	96.77%	95.01%	94.51%

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:

	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020
Bank Deposits					
Demand	5,463	6,487	8,808	6,028	2,916
Securities					
Up to 3 months	13,470	24,435	12,452	15,274	13,987
Between 3 months to 6 months	11,890	12,390	15,203	4,973	-
Between 6 months to 1 year	27,394	15,133	-	13,975	22,553
Between 3 years to 4 years	-	-	22,601	22,561	22,515
Total	58,217	58,445	59,064	62,811	61,971

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.

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 outstanding balances 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:

	Q1 2019			Q2 2019			Q3 2019			Q4 2019			Q1 2020		
	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	52,754	52,754	-	51,958	51,958	-	50,256	50,256	-	56,783	56,783	-	59,055	59,055	-
Bank ²	5,463	5,463	1,093	6,487	6,487	1,297	8,808	8,808	1,762	6,028	6,028	1,206	2,916	2,916	583
Other assets ³	7,205	7,205	7,231	7,720	7,720	7,747	7,949	7,949	8,038	6,705	6,705	6,741	9,335	9,335	9,390
Total	65,422	65,422	8,324	66,165	66,165	9,044	67,013	67,013	9,800	69,516	69,516	7,947	71,306	71,306	9,973

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 March 31, 2020, TNTCC's investment assets were in line with the ALM Policy.

REMUNERATION

NTC's Total Compensation Policy applies to all partners world-wide. The Compensation and Benefits Committee (CBC) of the NTC Board has primary responsibility for overseeing the compensation of the directors and executive officers of the Corporation and its subsidiaries, the employee benefit and equity-based plans of the organization; and management development and succession planning, including with respect to the position of Chief Executive Officer (CEO). The CBC consists of independent non-executive directors and takes advice from external consultants in all areas of compensation. Members of the CBC are compensated for their services with both cash compensation and Restricted Stock Units (RSU). Total remuneration earned by the CBC members for 2019 was US\$1,180,079 with a combination of cash and stock. The CBC met 4 times during 2019.

Remuneration design and structure at NTC focuses on all elements of total compensation and differentiation to avoid entitlement, develop a high performance culture, and promote behaviors that are consistent with Northern Trust's desired culture and character, and our values of service, expertise, and integrity. In addition to fixed remuneration, NTC offers variable compensation which includes short-term and long-term incentives where appropriate. The CBC reviews the remuneration policy on an annual basis.

Annual review processes for all partners include performance expectations related to the monitoring and mitigation of risk. In completing the annual performance evaluation and compensation planning, managers receive information on how to incorporate appropriate performance expectations relative to the management of risk into the review process. As part of the annual salary reviews and incentive process, managers recommend specific total compensation activities reflecting their discretionary assessment of specific objective and subjective factors including performance against risk expectations.

NTC's Chief Risk Officer (CRO) and the Global Head of Corporate Risk Management (CRM) participate in quarterly discussions with NTC's Chief Financial Officer and Chief Human Resources Officer regarding the financial performance as well as consideration of risk factors such as credit loss reserves and operational losses. The CRO also participates in funding discussions that inform the recommendation to the CBC for the corporate pool funding level as well as to the Chairman and CEO for the Business Unit allocations. CRM has developed a process to track and consolidate risk events for the plan year and this information is provided to Business Unit leaders and managers for incorporation in performance review and compensation recommendations.

Incentive pool funding is a discretionary pool amount approved by the CBC. The funding level is based on several factors including a defined range based on a percentage of NTC's pre-tax income, performance against profit plan and affordability. The profit plan determination includes risk considerations including reserves for credit and operational losses and other risk assessments. When choosing appropriate measures for incentive plans, these goals are aligned with those of the business.

As these business and financial goals are achieved, partners are rewarded accordingly to recognize the value of their contribution. To determine an individual's pay and incentive allocation, managers will take into consideration discretionary assessment of specific objective and subjective factors such as:

- Corporate and business unit performance;
- Performance within a standard risk expectation for all staff;
- Prior and expected individual performance and long term impact; and
- Team and individual contributions.

In certain circumstances, performance factors can result in no increase to base pay and/or no incentive award for the performance period.

All regular partners are eligible for a discretionary incentive award subject to company and individual performance. Managers recommend a single incentive award which, depending on the amount of the recommended award, may be paid in all cash or a mix of cash and RSU awards.

Long-term incentive awards usually are awarded in the form of RSU which typically vest ratably over a four year period. The purpose of the long-term incentive award is to link current and future business leaders to overall long-term performance of the organization. Long-term incentive awards are subject to forfeiture prior to vesting, and all incentives are subject to the Policy on Recoupment. Consistent with NTC's risk-mitigation strategies for its compensation program, the CBC shall review all unvested long-term incentive awards in the case of a financial restatement or misconduct on behalf of the employee.

A Total Compensation Policy Statement has been established for NTC employees in Canada. All NTC employees in Canada are employed by the Canada Branch. All employees of the Canada Branch that are also officers of that entity are designated and serve as officers of TNTCC. On an annual basis this policy statement is reviewed by the Human Resources and Governance Committee of TNTCC's Board of Directors and approved by TNTCC's Board of Directors.

For the purposes of this policy statement "Senior Management" for NTC Canada has been defined to capture the following eight (8) roles:

A – TNTCC's Chief Executive Officer / Canada Branch Principal Officer;

B – each officer of TNTCC/Canada Branch that is a head of oversight functions (specifically, the Chief Financial Officer and the Chief Risk and Compliance Officer);

C – each other officer of TNTCC/Canada Branch that is also a member of the NTC Canada Management Committee (specifically, the Chief Operating Officer and Head of Relationship Management & Client Service, the Assistant General Counsel and Senior Vice President, Client Technology & Sales Support);

D – TNTCC/Canada Branch Senior Vice President, Global Securities Lending; and

E – TNTCC/Canada Branch Senior Vice President, Business Development.

“Other Material Risk Takers” are defined as those teams and individuals attached to a function that could have the ability to impact the risk profile of the company, however these all operate within appropriate governance structures and under delegated authorized limits from Senior Management. There are 3 employees in the Other Material Risk Takers group, namely the VP, Business Development, VP, Finance and Controller and VP, Planning and Analysis.

Table 8a & 8b : Total Value of Remuneration Award for Senior Management and Other Material Risk Takers

The table below provides a breakdown of the total value of remuneration award for Senior Management and Other Material Risk Takers

Table 8a	Unrestricted		Deferred	
	Year ended December 31		Year ended December 31	
	2018	2019	2018	2019
<u>Fixed Remuneration</u>				
•Cash-Based				
Wages(Regular)/Dividend Cash Equivalent	\$2,153	\$2,311	-	-
RRSP employer contributions	-	-	\$207	\$230
<u>Variable Remuneration</u>				
•Cash-Based	\$617	\$1,026	-	-
•Shares and Share-linked instruments				
Stock Option/RSU Grants	-	-	\$474	\$464
Total	\$2,770	\$3,337	\$681	\$694

Table 8b

	Year ended December 31	
	2018	2019
Number of employees receiving variable remuneration	10	11
Number of employees and total amount of guaranteed bonuses		
Total number of outstanding deferred remuneration shares (in shares)	15,192	13,669
Total amount of deferred remuneration paid out in year (000s)	\$447	\$525