

Northern Trust Corporation

Liquidity Coverage Ratio Public Disclosure

*For the quarterly period ended September 30, 2018 **

** Explanatory Note: The quantitative and qualitative information regarding the calculation of, and factors affecting, Northern Trust Corporation's liquidity coverage ratio contained throughout this document: (i) reflects certain adjustments to Northern Trust Corporation's recognition of excess high-quality liquid assets held by certain of its consolidated subsidiaries; and (ii) supersedes the information with respect to such matters contained in any public disclosure made available by Northern Trust Corporation prior to February 14, 2019.*



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Northern Trust Corporation Overview

Northern Trust Corporation (the “Corporation”) is a financial holding company that is a leading provider of wealth management, asset servicing, asset management, and banking solutions for corporations, institutions, families and individuals. The Corporation focuses on managing and servicing client assets through its two client-focused reporting segments: Corporate & Institutional Services and Wealth Management. Asset management and related services are provided to Corporate & Institutional Services and Wealth Management clients primarily by the Asset Management business. The Corporation conducts business through various U.S. and non-U.S. subsidiaries, including through its principal subsidiary, The Northern Trust Company. At September 30, 2018, the Corporation had consolidated total assets of \$132.4 billion and stockholders’ equity of \$10.4 billion.

US Liquidity Coverage Ratio

In September 2014, the U.S. banking agencies finalized rules (“LCR Final Rule”) to implement the calculation of the Basel Committee on Banking Supervision liquidity coverage ratio (“LCR”) in the United States for large banking organizations, such as the Corporation. The requirements of the LCR Final Rule are intended to promote the short-term resilience of the liquidity risk profile of covered banking organizations, improve the banking industry’s ability to absorb shocks arising from financial and economic stress and improve the measurement and management of liquidity risk. Among other things, the LCR Final Rule requires covered banking organizations, which include the Corporation, to maintain an amount of high-quality liquid assets (“HQLAs”) equal to or greater than 100% of the banking organization’s total net cash outflows over a 30 calendar-day standardized supervisory liquidity stress scenario. The Corporation has been required to calculate its LCR on a daily basis since July 2016.

The numerator of the LCR, the HQLA amount, is comprised of three categories of assets: Level 1 liquid assets, Level 2A liquid assets and Level 2B liquid assets. The fair values, as determined under U.S. generally accepted accounting principles (“GAAP”), of the banking organization’s Level 2A liquid assets and Level 2B liquid assets are subject to prescribed haircuts of 15% and 50%, respectively, as they are considered less liquid than Level 1 assets. The amount of Level 2 liquid assets (Level 2A and Level 2B together) may not comprise more than 40% of the banking organization’s total HQLA amount. The amount of Level 2B liquid assets may not comprise more than 15% of the total HQLA amount. There is no cap on the amount of Level 1 liquid assets included in the total HQLA amount as these assets are considered the most liquid.

The denominator of the LCR, the total net cash outflow amount, is determined under the LCR Final Rule by applying outflow and inflow rates, which reflect certain standardized stressed assumptions, against the balances of the banking organization’s funding sources, obligations, transactions and assets over a prospective 30 calendar-day period. Inflows that can be included to offset outflows are limited to 75% of outflows to ensure that the banking organization is maintaining sufficient on-balance-sheet liquidity and is not overly reliant on inflows, which may not materialize in a period of stress.

LCR Public Disclosure Requirement

In December 2016, the Board of Governors of the Federal Reserve System issued the U.S. LCR Disclosure Rule. Under this rule, the Corporation is required to disclose publicly, on a quarterly

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basis, quantitative information about its LCR calculation and a qualitative discussion of the factors affecting its LCR.

This public disclosure contains the Corporation's LCR quantitative and qualitative information for the third quarter of 2018. The Corporation's average LCR of 107% in the third quarter of 2018 is 1% higher than its LCR of 106% in the second quarter. The drivers of the change include a higher HQLA balance based on a \$1.4 billion increase in U.S. Government Securities partially offset by a decrease in deposits. The Corporation's average quarterly LCR is expected to fluctuate period over period due to normal business activity driven by client activity, management decisions and market conditions.

Northern Trust Corporation LCR - Quantitative

3Q18 Northern Trust Corporation's Liquidity Coverage Ratio Calculation & Components

July 1, 2018 to September 30, 2018 (in millions)	Average Unweighted Amount ⁽¹⁾	Average Weighted Amount ⁽¹⁾
High-Quality Liquid Assets		
(1) Total eligible high-quality liquid assets (HQLA), of which:	53,437	51,354
(2) Eligible Level 1 liquid assets	39,550	39,550
(3) Eligible Level 2A liquid assets	13,887	11,804
(4) Eligible Level 2B liquid assets	—	—
Cash Outflow Amounts		
(5) Deposit outflow from retail customers and counterparties, of which:	9,966	815
(6) Stable retail deposit outflow	2,605	78
(7) Other retail funding	7,357	736
(8) Brokered deposit outflow	4	1
(9) Unsecured wholesale funding outflow, of which:	90,358	47,704
(10) Operational deposit outflow	43,243	10,811
(11) Non-operational funding outflow	42,770	35,883
(12) Unsecured debt outflows	—	—
(13) Secured wholesale funding and asset exchange outflow	4,344	1,011
(14) Additional outflow requirements, of which:	28,678	7,956
(15) Outflow related to derivative exposures and other collateral requirements	2,553	2,553
(16) Outflow related to credit and liquidity facilities including unconsolidated structured transactions and mortgage commitments	26,125	5,403
(17) Other contractual funding obligation outflow	999	999
(18) Other contingent funding obligations outflow	—	—
(19) Total Cash Outflow	130,001	57,474
Cash Inflow Amounts		
(20) Secured lending and asset exchange cash inflow	529	140
(21) Retail cash inflow	610	305
(22) Unsecured wholesale cash inflow	9,083	8,977
(23) Other cash inflows, of which:	823	823
(24) Net derivative cash inflow	742	742
(25) Securities cash inflow	81	81
(26) Broker-dealer segregated account inflow	—	—
(27) Other cash inflow	—	—
(28) Total Cash Inflow	11,046	10,245
		Average Amount ⁽²⁾
(29) HQLA amount		51,354
(30) Total net cash outflow amount excluding the maturity mismatch add-on		47,229
(31) Maturity mismatch add-on		720
(32) Total net cash outflow amount		47,949
(33) Liquidity Coverage Ratio (%)		107%

(1) Figure may not sum due to rounding

(2) The amounts reported in this column may not equal the calculation of those amounts using component amounts reported in rows 1-28 due to technical factors such as the application of Level 2 liquidity asset caps, the total inflow cap, and for depository institution holding companies subject to subpart G, the application of the modification to total net cash outflows.

Northern Trust Corporation LCR - Qualitative

Eligible HQLAs:

The Corporation's balance sheet includes liquid short-term money market assets and investment securities, both providing a strong source of liquidity.

For the third quarter of 2018, the Corporation's total eligible average weighted HQLAs were \$51.4 billion. Level 1 liquid assets, considered the most liquid under the LCR Final Rule, accounted for approximately 77% of the total eligible average weighted HQLAs, or \$39.6 billion. The Level 1 liquid assets, which are not limited and do not draw a haircut under the LCR Final Rule, include central bank reserves, U.S. Treasury securities, and securities issued or guaranteed by sovereigns. Level 2A liquid assets, which attract a 15% haircut per the LCR Final Rule, accounted for approximately 23% of the total eligible average weighted HQLAs, or \$11.8 billion.

Cash Outflow Amounts:

The Corporation's balance sheet is liability-driven. That is, the main driver of balance sheet changes is changing levels of client deposits, which are generally related to the level of global custody assets serviced and commercial and personal deposits. This liability-driven business model differs from a typical asset-driven business model, where increased levels of deposits and wholesale borrowings are required to support, for example, increased levels of lending for execution of the bank's investment strategy. The liability-driven balance sheet is reflected in the Corporation's LCR cash outflows.

For the third quarter of 2018, the Corporation's average weighted net cash outflow was \$57.5 billion. The largest drivers of this total were operational deposit outflows and non-operational funding outflows. Both of these items are driven by the Corporation's institutional custody clients. Under the LCR Final Rule, operational deposits are considered a stable source of funding and draw a 25% outflow rate. Average weighted operational deposits equaled \$10.8 billion for the third quarter 2018. Non-operational funding outflow rates are higher under the LCR Final Rule, ranging from 100% for deposits with financial counterparties to 40% for most other non-financial counterparties. The Corporation's average weighted non-operational deposits equaled \$35.9 billion for the third quarter of 2018.

Cash Inflow Amounts:

The Corporation's average weighted cash inflows totaled \$10.2 billion, mainly driven by weighted unsecured wholesale cash inflows of \$9.0 billion for the third quarter of 2018. This amount was comprised of time deposits placed at other financial institutions that mature within 30 days and demand balances held at other banks which support the Corporation's global payment, clearing and settlement business.

Liquidity Risk Management

The Corporation employs an integrated risk management framework to support its strategies. The framework provides a methodology to identify, assess, monitor, measure, manage and report both internal and external risks to the Corporation, and promotes a culture of risk awareness across the organization. The Corporation's risk culture encompasses the general awareness, attitude and conduct of employees with respect to risk and the management of risk across all lines of defense within the organization. The key risk categories that are inherent in

the Corporation's business activities include: credit, operational, fiduciary, compliance, market, liquidity, and strategic risk.

As part of the integrated risk framework, the Corporation has established key risk identification and risk management processes, embedded within its businesses to enable prudent risk-taking behavior. Integral to the risk framework are the Corporation's processes for definition and communication of acceptable risk appetite and reporting against risk appetite, dynamic assessment of risk against its strategic and business objectives, and a "three lines of defense" operating model. The Corporation defines the organization's risk appetite as the amount and types of risk that it is willing to assume in its exposures and business activities to achieve its strategic and financial objectives. The Corporation manages its business activities consistent with a Board approved Corporate Risk Appetite Statement for each key risk category. The Corporation's Corporate Risk Appetite Statement reflects the expectation that risk is consciously considered as part of day-to-day activities and strategic decisions. The Corporation's risk assessment process, aligned with this expectation, consists of a series of programs that identify measure, manage, and report risks in line with risk appetite and guidelines. A common risk language used across the Corporation supports risk identification processes and consistent identification of risk, designation of material risks, and grouping of risks into risk themes for effective analysis, oversight, and management of the Corporation's aggregate risk profile.

The Corporation maintains a "three lines of defense" operating model to embed a robust risk management capability within its businesses. The model, used to communicate risk management expectations across the organization, contains three roles, each a complimentary level of risk management accountability.

The Corporation's Asset and Liability Management Committee provides first line management oversight and is responsible for approving strategies and activities within the risk appetite, overseeing balance sheet resources, and reviewing reporting such as cash flows and stress test results. The Corporation's Market and Liquidity Risk Committee provides second line oversight and is responsible for approving sub policies and procedures, establishing and monitoring risk metrics, and approving methodologies and key assumptions that drive liquidity risk measurement. Audit Services provides third line independent assurance to the effectiveness of the integrated risk framework.

Liquidity risk is analyzed and monitored in order to ensure compliance with the approved risk appetite. Various liquidity analysis and monitoring activities are employed by the Corporation to understand the nature and sources of its liquidity risks, including: liquidity stress testing, liquidity metric monitoring, collateral management, intraday management, cash flow projections, operational deposit assessments, liquid asset buffer measurement, funds transfer pricing, and contingency funding planning.

The liquidity risk management process is supported through management and regulatory reporting. Both the Corporation's Treasury and Market and Liquidity Risk Management functions produce management reports using the outputs from the liquidity assessment, monitoring, and analysis, enabling oversight bodies to make informed decisions and support management of risk within risk appetite. Holistic liquidity metrics such as LCR and internal liquidity stress testing are actively monitored, along with a suite of more granular metrics that provide early warning indicators of changes in the risk profile.

Forward-Looking Statements

This document may include statements which constitute “forward-looking statements” within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are identified typically by words or phrases such as “believe,” “expect,” “anticipate,” “intend,” “estimate,” “project,” “likely,” “plan,” “goal,” “target,” “strategy,” and similar expressions or future or conditional verbs such as “may,” “will,” “should,” “would,” and “could.” Forward-looking statements include statements, other than those related to historical facts that relate to the Corporation’s liquidity coverage ratio, factors influencing such ratio and its components and the Corporation’s management of such ratio and its components. These statements are based on the Corporation’s current beliefs and expectations of future events or future results, and involve risks and uncertainties that are difficult to predict and subject to change. These statements are also based on assumptions about many important factors, including the factors discussed in the Corporation’s most recent annual report on Form 10-K and other filings with the U.S. Securities and Exchange Commission, all of which are available on the Corporation’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. The Corporation assumes no obligation to update its forward-looking statements.