

# Northern Trust Corporation

## Net Stable Funding Ratio Public Disclosure

*For the semiannual period ended June 30, 2023*

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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 to corporations, institutions, families and individuals. The Corporation focuses on managing and servicing client assets through its two client-focused reporting segments: Asset Servicing and Wealth Management. Asset management and related services are provided to Asset Servicing 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 June 30, 2023, the Corporation had consolidated total assets of \$156.8 billion and stockholders' equity of \$11.6 billion. Except where the context requires otherwise, the term "Northern Trust" means the Corporation and its subsidiaries on a consolidated basis.

## Net Stable Funding Ratio

In October 2020, the U.S. banking agencies issued the final rule ("NSFR Final Rule") for the calculation, reporting, and maintenance of the Net Stable Funding Ratio ("NSFR"). The NSFR rule is a quantitative liquidity measure of a large banking organization's, such as the Corporation, ability to access the funding stability whereby the Available Stable Funding ("ASF") over a one-year time horizon must be greater than or equal to the Required Stable Funding ("RSF") amount as calculated based on the liquidity characteristics of assets, derivative exposures, and commitments over the same period.

A bank's total ASF is the portion of its capital and liabilities that will remain with the institution for more than one year. The broad characteristics of an institution's funding sources and their assumed degree of stability are the basis for determining ASF. An ASF factor is assigned to the carrying value of each element of funding. ASF factors range from 0-100%; higher factors increase the numerator and NSFR.

The ASF factors broadly fall into the following categories based on the counterparty, tenor and product.

- 100% - the funding is expected to be fully available in more than a year (i.e., equity and certain debt);
- 90-95% - applies to very stable funding (i.e., retail deposits);
- 50% - is a relatively stable funding source (i.e., commercial deposits or operational deposits); and
- 0% - the funding from this source is unreliable (i.e., overnight funding).

The total amount of ASF is the sum of the ASF amounts for each category of liability.

A bank's total RSF is the amount of stable funding that is required to be held given the liquidity characteristics and residual maturities of its assets and the contingent liquidity risk arising from its off-balance sheet exposures. For each item, the RSF amount is determined by assigning an RSF factor to the carrying value of the exposure. RSF factors range from 0-100%; higher factors increase the denominator and lower NSFR.

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The RSF factors broadly fall into the following categories based on counterparty, tenor, secured vs. unsecured lending, risk weight and product.

- 0% - applies to fully liquid assets including cash and Level 1 assets\*;
- 5% - applies to the undrawn legal commitments;
- 15% - applies to Level 2a assets\* and short-term (less than 6 months) lending to financial counterparties;
- 50% - applies to Level 2b assets\*, certain encumbered securities, and lending to non-financial counterparties;
- 65% and 85% - applies to retail mortgages, clients loans, and longer term lending; and
- 100% - applies to derivatives, all other assets, long-term loans, and securities encumbered over a year.

The total RSF amount is the sum of the RSF for each category.

## NSFR Public Disclosure Requirement

In February 2021, the Board of Governors of the Federal Reserve System issued the U.S. NSFR Disclosure Rule. Under this rule, the Corporation is required to disclose publicly, every second and fourth calendar quarter beginning with second quarter of 2023, quantitative information about its NSFR calculation and a qualitative discussion of the factors affecting its NSFR.

This public disclosure contains the Corporation's NSFR quantitative and qualitative information for the semiannual period ended June 30, 2023, which includes the previous two quarters of 2023 for reporting. The Corporation's average daily NSFR was 118% for the first quarter and 119% for the second quarter of 2023.

The Corporation's average NSFR may fluctuate period-over-period due to normal business activity driven by client activity, management decisions and market conditions.

(\*) An organization's total high-quality liquid assets ("HQLA") are comprised of three categories: Level 1 liquid assets, Level 2a liquid assets and Level 2b liquid assets. Level 2a liquid assets and Level 2b liquid assets are subject to prescribed factors of 15% and 50%, respectively, as they are considered less liquid than Level 1 assets which have a 0% factor.

# Northern Trust Corporation NSFR - Quantitative

## NTC 1Q23 and 2Q23 Quarterly Average NSFR

January 1 to March 31, 2023		Average Unweighted Amount					Average Weighted Amount (1)
		Open Maturity	< 6 months	6 months to < 1 year	≥ 1 year	Perpetual	
<i>In millions of U.S. dollars</i>							
<b>ASF ITEM</b>							
1	Capital and securities:	—	—	—	5,044	11,244	16,288
2	NSFR regulatory capital elements	—	—	—	2,296	11,244	13,540
3	Other capital elements and securities	—	—	—	2,748	—	2,748
4	Retail funding:	10,563	1,279	—	—	—	10,769
5	Stable deposits	2,020	219	—	—	—	2,127
6	Less stable deposits	8,224	1,059	—	—	—	8,355
7	Sweep deposits, brokered reciprocal deposits, and brokered deposits	319	—	—	—	—	287
8	Other retail funding	—	—	—	—	—	—
9	Wholesale funding:	97,552	18,105	33	830	—	43,629
10	Operational deposits	55,957	—	—	—	—	27,978
11	Other wholesale funding	41,596	18,105	33	830	—	15,651
	Other liabilities:						
12	NSFR derivatives liability amount						
13	Total derivatives liability amount					1,149	
14	All other liabilities not included in categories 1 through 13 of this table	5,092	433	—	—	—	—
15	<b>Total ASF (2)</b>						65,943
<b>RSF ITEM</b>							
16	Total high-quality liquid assets (HQLA):	36,672	3,667	1,624	29,314	—	2,257
17	Level 1 liquid assets	36,672	3,253	1,548	16,377	—	—
18	Level 2A liquid assets	—	285	10	12,435	—	1,909
19	Level 2B liquid assets	—	129	66	502	—	348
20	Zero percent RSF assets that are not level 1 liquid assets or loans to financial sector entities or their consolidated subsidiaries	38	152	—	—	—	—
21	Operational deposits placed at financial sector entities or their consolidated subsidiaries	444	576	—	—	—	510
22	Loans and securities:	5,664	14,230	7,064	34,932	—	38,230
23	Loans to financial sector entities secured by level 1 liquid assets	19	652	1,655	—	—	828
24	Loans to financial sector entities secured by assets other than level 1 liquid assets and unsecured loans to financial sector entities	5,350	5,909	—	1,429	—	3,118
25	Loans to wholesale customers or counterparties that are not financial sector entities and loans to retail customers or counterparties	286	7,135	4,877	17,187	—	20,758
26	Of which: With a risk weight no greater than 20 percent under Regulation Q (12 CFR part 217)	—	—	—	1	—	1
27	Retail mortgages	—	—	—	4,528	—	2,970
28	Of which: With a risk weight of no greater than 50 percent under Regulation Q (12 CFR part 217)	—	—	—	4,395	—	2,857
29	Securities that do not qualify as HQLA	9	533	532	11,787	—	10,556

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January 1 to March 31, 2023		Average Unweighted Amount					Average Weighted Amount (1)
<i>In millions of U.S. dollars</i>		Open Maturity	< 6 months	6 months to < 1 year	≥ 1 year	Perpetual	
	Other Assets:						
30	Commodities						—
31	Assets provided as initial margin for derivative transactions and contributions to CCPs' mutualized loss-sharing arrangements					24	21
32	NSFR derivatives asset amount					673	673
33	Total derivatives asset amount					1,822	
34	RSF for potential derivatives portfolio valuation changes					1,911	96
35	All other assets not included in the above categories, including nonperforming assets	7,035	125	71	5,477	—	12,487
36	Undrawn commitments					31,382	1,569
37	<b>TOTAL RSF prior to application of required stable funding adjustment percentage</b>						55,843
38	<b>Required stable funding adjustment percentage</b>						1.00
39	<b>TOTAL adjusted RSF</b>						55,843
40	<b>NET STABLE FUNDING RATIO</b>						118 %

(1) Figure may not sum due to rounding.

(2) Total ASF includes subsidiary funding that cannot be transferred. The balance is not included in any of the disclosure line items.

# Net Stable Funding Ratio Public Disclosure

April 1 to June 30, 2023		Average Unweighted Amount					Average Weighted Amount (1)
		Open Maturity	< 6 months	6 months to < 1 year	≥ 1 year	Perpetual	
<i>In millions of U.S. dollars</i>							
<b>ASF ITEM</b>							
1	Capital and securities:	—	—	—	5,068	11,477	16,545
2	NSFR regulatory capital elements	—	—	—	2,307	11,477	13,784
3	Other capital elements and securities	—	—	—	2,761	—	2,761
4	Retail funding:	9,349	1,634	—	—	—	10,001
5	Stable deposits	2,042	288	—	—	—	2,214
6	Less stable deposits	7,061	1,346	—	—	—	7,566
7	Sweep deposits, brokered reciprocal deposits, and brokered deposits	245	—	—	—	—	221
8	Other retail funding	—	—	—	—	—	—
9	Wholesale funding:	91,006	23,365	8	863	—	45,018
10	Operational deposits	55,399	—	—	—	—	27,700
11	Other wholesale funding	35,606	23,365	8	863	—	17,319
	Other liabilities:						
12	NSFR derivatives liability amount						
13	Total derivatives liability amount					1,075	
14	All other liabilities not included in categories 1 through 13 of this table	3,879	451	—	—	—	—
15	Total ASF (2)						66,229
<b>RSF ITEM</b>							
16	Total high-quality liquid assets (HQLA):	34,479	3,699	1,236	29,126	—	2,193
17	Level 1 liquid assets	34,479	3,360	1,173	16,241	—	—
18	Level 2A liquid assets	—	261	9	12,446	—	1,907
19	Level 2B liquid assets	—	79	53	439	—	286
20	Zero percent RSF assets that are not level 1 liquid assets or loans to financial sector entities or their consolidated subsidiaries	20	136	—	—	—	—
21	Operational deposits placed at financial sector entities or their consolidated subsidiaries	447	579	—	—	—	513
22	Loans and securities:	4,642	15,366	6,378	35,518	—	38,349
23	Loans to financial sector entities secured by level 1 liquid assets	2	920	1,401	—	—	701
24	Loans to financial sector entities secured by assets other than level 1 liquid assets and unsecured loans to financial sector entities	4,348	7,022	—	1,606	—	3,312
25	Loans to wholesale customers or counterparties that are not financial sector entities and loans to retail customers or counterparties	290	6,994	4,612	17,868	—	21,136
26	Of which: With a risk weight no greater than 20 percent under Regulation Q (12 CFR part 217)	—	—	—	1	—	1
27	Retail mortgages	—	—	—	4,452	—	2,949
28	Of which: With a risk weight of no greater than 50 percent under Regulation Q (12 CFR part 217)	—	—	—	4,177	—	2,715
29	Securities that do not qualify as HQLA	2	430	365	11,592	—	10,252
	Other Assets:						

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April 1 to June 30, 2023		Average Unweighted Amount					Average Weighted Amount (1)
		Open Maturity	< 6 months	6 months to < 1 year	≥ 1 year	Perpetual	
<i>In millions of U.S. dollars</i>							
30	Commodities						—
31	Assets provided as initial margin for derivative transactions and contributions to CCPs' mutualized loss-sharing arrangements					48	41
32	NSFR derivatives asset amount					401	401
33	Total derivatives asset amount					1,477	
34	RSF for potential derivatives portfolio valuation changes					1,657	83
35	All other assets not included in the above categories, including nonperforming assets	7,146	127	78	5,600	—	12,734
36	Undrawn commitments					31,007	1,555
37	<b>TOTAL RSF prior to application of required stable funding adjustment percentage</b>						55,869
38	<b>Required stable funding adjustment percentage</b>						1
39	<b>TOTAL adjusted RSF</b>						55,869
40	<b>NET STABLE FUNDING RATIO</b>						119 %

(1) Figure may not sum due to rounding.

(2) Total ASF includes subsidiary funding that cannot be transferred. The balance is not included in any of the disclosure line items.



## Northern Trust Corporation NSFR - Qualitative

### Eligible ASF:

The Corporation's balance sheet is primarily liability-driven. That is, the main driver of balance sheet changes comes from changing levels of client deposits, which are generally related to the level of global custody assets serviced and commercial and personal deposits and can also be influenced by market conditions. 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. The liability-driven balance sheet is reflected in the Corporation's NSFR ASF along with the Corporation's NSFR capital elements which include equity and qualified debt instruments.

### Eligible RSF:

The Corporation's balance sheet includes liquid short-term money market assets and investment securities, both providing a strong source of liquidity. The other components of the RSF include the non-HQLA securities, loans, commitments, NSFR net derivatives and other assets. The RSF factors range from 0% for the most liquid assets to 100% for the least reliable funding sources.

### First Quarter of 2023:

For the first quarter of 2023, the Corporation's average weighted ASF was \$65.9 billion. The largest drivers of this total were wholesale funding including operational deposits, which are driven by the Corporation's institutional custody clients. Under the NSFR Final Rule, operational deposits are considered a stable source of funding and draw a 50% ASF factor. Average weighted operational deposits equaled \$28.0 billion. Other wholesale funding ASF factors range from 0% for deposits with financial counterparties to 50% for most other non-financial counterparties. The Corporation's average weighted other wholesale funding equaled \$15.7 billion. Retail Deposits are an additional source of stable funding with an ASF factor between 90-95%; weighted retail deposits equaled \$10.8 billion. The Regulatory Capital ASF factor is 100% and equaled \$16.3 billion for the period.

For the first quarter of 2023, the Corporation's total eligible average weighted RSF was \$55.8 billion. Total eligible average weighted HQLA liquid assets, considered the most liquid under the NSFR Final Rule had an average weighted RSF of \$2.3 billion. The Level 1 liquid assets, which are not limited, and do not draw a factor under the NSFR Final Rule, include central bank reserves, U.S. Treasury securities, and securities issued or guaranteed by sovereigns. Level 2A liquid assets receive a 15% factor and the Level 2B liquid assets receive a 50% factor.

The Corporation's loans and non-HQLA investment securities have RSF factors that range between 15%-100% based on asset type, counterparty and maturity. The average weighted RSF for the period was \$38.2 billion. The net derivative exposure balances was \$0.8 billion for the period. The undrawn commitments receives a 5% RSF factor with a weighted balance of \$1.6 billion. The other assets categories consists of various long-term and short-term assets including receivables, bank premises, goodwill, software and other items, which are assigned a 100% factor with a weighted RSF balance of \$12.5 billion.

### Second Quarter of 2023:

For the second quarter of 2023, the Corporation's average weighted ASF was \$66.2 billion. The largest drivers of this total were wholesale funding including operational deposits, which are

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driven by the Corporation's institutional custody clients. Under the NSFR Final Rule, operational deposits are considered a stable source of funding and draw a 50% ASF factor. Average weighted operational deposits equaled \$27.7 billion. Other wholesale funding ASF factors range from 0% for deposits with financial counterparties to 50% for most other non-financial counterparties. The Corporation's average weighted other wholesale funding equaled \$17.3 billion. Retail Deposits are an additional source of stable funding with an ASF factor between 90-95%; weighted retail deposits equaled \$10.0 billion. The Regulatory Capital ASF factor is 100% and equaled \$16.5 billion for the period.

For the second quarter of 2023, the Corporation's total eligible average weighted RSF was \$55.9 billion. Total eligible average weighted HQLA liquid assets, considered the most liquid under the NSFR Final Rule had an average weighted RSF of \$2.2 billion. The Level 1 liquid assets, which are not limited, and do not draw a factor under the NSFR Final Rule, include central bank reserves, U.S. Treasury securities, and securities issued or guaranteed by sovereigns. Level 2A liquid assets receive a 15% factor and the Level 2B liquid assets receive a 50% factor.

The Corporation's loans and non-HQLA investment securities have RSF factors that range between 15%-100% based on asset type, counterparty and maturity. The average weighted RSF for the period was \$38.3 billion. The net derivative exposure balances was \$0.5 billion for the period. The undrawn commitments receives a 5% RSF factor with a weighted balance of \$1.6 billion. The other assets categories consists of various long-term and short-term assets including receivables, bank premises, goodwill, software and other items, which are assigned a 100% factor with a weighted RSF balance of \$12.7 billion.

## Risk Management Overview

Northern Trust employs an integrated risk management framework to support its business decisions and the execution of its corporate strategies. The framework provides a methodology to identify, manage, report and govern both internal and external risks to Northern Trust, and promotes a culture of risk awareness and good conduct across the organization. Northern Trust'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. Northern Trust cultivates a culture of effective risk management by defining and embedding risk management accountabilities in all employee performance expectations and provides training, development and performance rewards to reinforce this culture.

Northern Trust's risk management framework contains three inter-related elements designed to support consistent enterprise risk identification, management and reporting: a comprehensive risk inventory, a static taxonomy of risk categories and a dynamic taxonomy of risk themes. The risk inventory is a detailed register of the risks inherently faced by Northern Trust. The risk categories and risk themes are classification systems used for classifying and managing the risk inventory and enabling different risk profile views. All identified risks inherent in Northern Trust's business activities are cataloged into the following risk categories: credit, operational, fiduciary, compliance, liquidity, market, and strategic risk. All material risks are also dynamically cataloged into various risk themes which are defined groupings that share common characteristics, focus on business outcomes and span across risk categories.

Northern Trust implements its risk management framework through a "three lines of defense" operating model, embedding a robust risk management capability within its businesses. The model, used to communicate risk management expectations across the organization, contains three roles, each with a complementary level of risk management accountability. Within this operating model, Northern Trust's businesses are the first line of defense for protecting it against the risks inherent in its businesses and are supported by dedicated business risk management teams. The Risk Management function, the second line of defense, sets the direction for Northern Trust's risk management activities and provides aggregate risk oversight and reporting in support of risk governance. Audit Services, the third line of defense, provides independent assurance as to the effectiveness of the integrated risk framework.

### Liquidity Risk Overview

Liquidity risk is the risk of not being able to raise sufficient funds or maintain collateral to meet balance sheet and contingent liability cash flow obligations when due, because of firm-specific or market-wide stress events.

Northern Trust maintains a strong liquidity position and liquidity risk profile. Northern Trust's balance sheet is primarily liability-driven. That is, the main driver of balance sheet changes comes from changing levels of client deposits, which are generally related to the level of custody assets serviced and commercial and personal deposits and can also be influenced by market conditions. 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. Northern Trust's balance sheet is generally comprised of high-quality assets that are managed to meet anticipated obligations under stress, resulting in low liquidity risk.

### **Liquidity Risk Framework and Governance**

Northern Trust maintains a liquidity risk framework consisting of risk management policies and practices to keep its risk profile within the Board-approved Corporate Risk Appetite Statement. All liquidity risk activities are overseen by the Risk Management function, which is independent of the businesses undertaking the activities.

The Liquidity Management Policy and exposure limits for liquidity risk 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. Limits are monitored based on measures such as the liquidity coverage ratio ("LCR"), the NSFR, and the liquidity stress-testing buffer across a range of time horizons. Treasury, in the first line of defense, proposes liquidity risk management strategies and is responsible for performing liquidity management activities. The Asset and Liability Management Committee ("ALCO") provides first-line management oversight and is responsible for approving strategies and activities within the risk appetite, monitoring risk metrics, overseeing balance sheet resources, and reviewing reporting such as cash flows, LCR, NSFR, and stress test results.

Market and Liquidity Risk Management, in the second line of defense, provides challenge to the first-line activities, evaluates compliance with regulatory requirements and process effectiveness, and escalates material items for corrective action. The Market and Liquidity Risk Committee ("MLRC") provides second-line oversight and is responsible for reviewing market and liquidity risk exposures, approving and monitoring risk metrics, and approving key methodologies and assumptions that drive liquidity risk measurement.

### **Liquidity Risk Analysis, Monitoring, and Reporting**

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 Northern Trust to understand better the nature and sources of its liquidity risks, including: liquidity stress testing, liquidity metric monitoring, collateral management, intraday management, cash flow projections, operational deposit modeling, liquid asset buffer measurement, funds transfer pricing, and contingency funding planning.

The liquidity risk management process is supported through management and regulatory reporting. Both Northern Trust's Treasury and Market and Liquidity Risk Management functions produce management reports that enable oversight bodies to make informed decisions and support management of liquidity risk within the approved risk appetite. Holistic liquidity metrics such as LCR, NSFR and internal liquidity stress testing are actively monitored, along with a suite of other 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 net stable funding 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.