



FIXED INCOME CLEARING CORPORATION

AND

NATIONAL SECURITIES CLEARING CORPORATION

PUBLIC QUANTITATIVE DISCLOSURES FOR CENTRAL COUNTERPARTIES

Q2 2021

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EXECUTIVE SUMMARY

In February 2015, CPMI-IOSCO issued its final report on Quantitative Disclosure Standards for Central Counterparties ("CCPs"), which provides specific quantitative disclosure requirements for CCPs relative to a number of the PFMI principles. These disclosures are intended to complement the narrative disclosures included in the CPMI-IOSCO Disclosure Framework*. This document contains the quantitative disclosures for the two divisions of the Fixed Income Clearing Corporation ("FICC") — the Government Securities Division ("GSD") and Mortgage-Backed Securities Division ("MBSD") — and the National Securities Clearing Corporation ("NSCC"). FICC and NSCC are wholly owned subsidiaries of The Depository Trust & Clearing Corporation ("DTCC").

The attached disclosures include, in addition to those required by CPMI-IOSCO, some supplemental disclosures as proposed by the Payments Risk Committee's Recommendations for Supporting Clearing Member Due Diligence of Central Counterparties (Feb 2013).

The information provided in this disclosure is reported as of the dates specified. For further information, please contact **CPMI-IOSCO Quant@dtcc.com**.

* The Disclosure Frameworks for FICC and NSCC can be found at www.dtcc.com

Q2 2021 SUPPLEMENTAL EXPANATORY NOTE

Management Note

U.S. equity markets closed the first half of 2021 at or near record highs as the economy continued its reopening and historic fiscal and monetary stimulus provided a consistent tailwind since the Spring of 2020. Markets continued to surge in the second quarter with the S&P 500 Index reaching a new all-time high in late-June while the Nasdaq and Dow rose, continuing the trend from the previous quarter. Fixed income yields reversed its upward trending during the second quarter, where 10-Year US Treasury yield declined 44.8 basis points. The equity and fixed income markets continue to be driven by progress on the vaccine rollout, accommodative monetary policy, fiscal stimulus, strong corporate earnings growth, and the reopening of the economy.

Clearing Fund Backtesting Results

At DTCC, backtesting is conducted to measure the sufficiency of the overall Clearing Fund coverage by comparing a Member's Required Deposit to the 3-day observed P&L for the Member's portfolio and aggregated into the CCP-level backtesting coverage data that is provided in this disclosure. The backtesting assesses the adequacy of 3-day liquidation period assumption in the event of Member default, and all VaR models at DTCC are currently calibrated at a minimum of 99% coverage.

FICC-Mortgage-Backed Securities Division (MBSD)

At the end of the second quarter of 2021, MBSD's 12-month backtesting coverage level further improved to 99.7%, as a result of Covid-19 related market volatility rolled off. The 1-month coverage ratio at MBSD was 99.9% for April, 99.5% for May, and 100% for June, reflecting the continued stabilization in the fixed income markets. Clearing Fund Requirement decrease was driven by shortening of durations on TBAs and decrease in volume. The median backtesting deficiency for the quarter was \$445 thousand.

FICC-Government Securities Division (GSD)

At the end of the second quarter of 2021, GSD's 12-month backtesting coverage level was 99.7%. The 1-month coverage ratio at GSD was 99.7% for April, 99.6% for May, and 99.6% for June, reflecting the continued stabilization in the fixed income markets. The median backtesting deficiency for the quarter was \$3.3 million.

National Securities Clearing Corporation (NSCC)

At the end of the second quarter of 2021, NSCC's 12-month backtesting coverage level was 99.7%, with the 1-month coverage ratio for April at 99.9%, 99.6% for May, and 99.8% for June. The median backtesting deficiency for the quarter was \$120 thousand. The largest deficiency incurred during the quarter was mainly driven by a single security exhibiting idiosyncratic risk.

NSCC's volatility charge relies on a parametric VaR methodology for liquid equities and applies haircuts to other eligible products. NSCC's VaR methodology has both equal weighted and front weighted historical return calibrations. The VaR construct allows NSCC to address dynamic changes in equity risk premiums and idiosyncratic risks typically linked to uncertainty about economic fundamentals, such as economic outlook, earnings forecasts, interest rates and central bank actions.

Q2 2021 SUPPLEMENTAL EXPANATORY NOTE CONT'D

Liquidity Resuts

In March 2021, NSCC submitted a proposed rule change to collect, when applicable, daily Supplemental Liquidity Deposits ("SLD") to NSCC's Clearing Fund. NSCC received regulatory approval of the enhanced SLD rule on June 20, 2021 and implemented it on June 23, 2021. An SLD payment obligation is determined if the daily liquidity need on a business day exceeds the sum of NSCC's qualifying liquid resources ("QLR") available to NSCC, after the application of a wide-range of stressed market assumptions. In the second quarter, NSCC observed two instances where the largest family payment obligation exceeded calculated QLR on two separate days in June totaling \$5.1BN and \$1.02BN. The settlement obligations were driven by June option expiration and Russell Indices Reconstitution activities respectively which represent days that NSCC experienced material increases in clearing activity. The SLD payment obligation is based on the calculated QLR and actual liquidity exposure over the upcoming settlement cycle that a Member's daily activity would pose to NSCC on that particular day in the event of that Member's default.

SLD is part of NSCC's QLR that includes cash deposits to the NSCC Clearing Fund; proceeds of the issuance and private placement of (a) short-term, unsecured notes in the form of commercial paper and extendable notes and (b) term debt; and cash that would be obtained by drawing on NSCC's committed 364-day credit facility with a consortium of banks. With recent SLD rule change, NSCC is able to address its liquidity exposure each business day based on Members' settlement activity and limit liquidity shortfalls due to forecasts of upcoming liquidity exposures based on historical activity. The SLD rule is Rule 4A in the NSCC rulebook that can be accessed via https://www.dtcc.com/~/media/Files/Downloads/legal/rules/nscc_rules.pdf. Full text of the SLD filings may be obtained by visiting the DTCC website at www.dtcc.com/legal/secrule-filings.aspx.

The SLD collections fully mitigated NSCC liquidity exposure as the amounts were collected at the start-of-day. For risk reporting and alignment to the QLR stress assumptions, these amounts are reported as QLR shortfalls for that business day.

At FICC, there were no payment obligations greater than qualifying liquid resources during the quarter.

Disclosure	Disclosure Description		Frequency	Data Type	FICC		NSCC	Explanatory Notes	
Reference			rrequency	Data Type	GSD	MBSD	Noce	ехріанатогу Notes	
Disclosu	re 4.1 - Total value of default resources (excluding initial and retained	variation margin), split by cleari	ing service if defa	ult funds are seg	regated by clear	ing service			
4.1.1	Prefunded - Own Capital Before		Quarterly/ Quarter End	USD \$MM	6	5.2	102.8	The Company maintains an amount referred to as the corporate contribution, to be applied to losses the Company as provided in the clearing agency rules. The amount of the corporate contribution is	
4.1.2	Prefunded - Own Capital Alongside			USD \$MM	n/a	n/a	n/a	generally equal to 50% of the Company's general business risk capital requirement.	
4.1.3	Prefunded - Own Capital After			USD \$MM	n/a	n/a	n/a		
4.1.4	Prefunded - Aggregate Participant Contributions - Required			USD \$MM	18,912	13,750	11,492	NSCC and each FICC Division calculates and collects Clearing Fund from its Members using a risk-base margin methodology. These amounts (a Member's "Required Fund Deposit") operate as the Member	
4.1.5	Prefunded - Aggregate Participant Contributions - Post-Haircut Posted			USD \$MM	26,690	15,739	12,486	margin, and the aggregate of all such Members' deposits is, collectively, the Clearing Fund, which operates as NSCC's/FICC (with respect to each division's) default fund.	
								For NSCC, on September 5, 2017, the US cash equities markets moved to a T+2 settlement cycle. Accordingly, after that date, the clearing fund has been calculated to take into account the shortened settlement cycle.	
4.1.6	Prefunded - Other			USD \$MM	n/a	n/a	n/a		
4.1.7	Committed - Own/parent funds that are committed to address a participant default (or round of participant defaults)		USD \$MM	n/a	n/a	n/a		
4.1.8	Committed - Aggregate participant commitments to address an initial participant def defaults)	ault (or initial round of participant		USD \$MM	n/a	n/a	n/a		
4.1.9	·			USD \$MM	n/a	n/a	n/a		
4.1.10	Committed - Other	,		USD \$MM	n/a	n/a	n/a		
Disclosu	ire 4.2 - Kccp - Quarter End								
4.2.1	Kccp - Kccp need only be reported by those CCPs which are, or seek to be a "qualifyin	g CCP" under relevant law.	Quarterly	USD \$MM	583	n/a	n/a		
		ļ.							
Disclosu	re 4.3 - Value of pre-funded default resources (excluding initial and re	tained variation margin) held fo	r each clearing sei	rvice					
4.3.1		etained variation margin) held for	r each clearing ser	rvice USD \$MM	7,994	2,800	8,586		
					7,994 7,994	2,800 2,800	8,586 8,586		
	Cash deposited at a central bank of issue of the currency concerned	Pre Haircut	Quarterly/	USD \$MM			· · · · · · · · · · · · · · · · · · ·		
4.3.1	Cash deposited at a central bank of issue of the currency concerned	Pre Haircut Post Haircut	Quarterly/	USD \$MM USD \$MM	7,994	2,800	8,586		
4.3.1	Cash deposited at a central bank of issue of the currency concerned	Pre Haircut Post Haircut Pre Haircut	Quarterly/	USD \$MM USD \$MM USD \$MM	7,994 0	2,800	8,586 0		
4.3.1	Cash deposited at a central bank of issue of the currency concerned Cash deposited at other central banks	Pre Haircut Post Haircut Pre Haircut Post Haircut	Quarterly/	USD \$MM USD \$MM USD \$MM USD \$MM	7,994 0 0	2,800 0 0	8,586 0 0		
4.3.1	Cash deposited at a central bank of issue of the currency concerned Cash deposited at other central banks	Pre Haircut Post Haircut Pre Haircut Post Haircut Post Haircut	Quarterly/	USD \$MM USD \$MM USD \$MM USD \$MM USD \$MM	7,994 0 0	2,800 0 0	8,586 0 0	See Explanatory Note from 4.1	
4.3.1	Cash deposited at a central bank of issue of the currency concerned Cash deposited at other central banks Secured cash deposited at commercial banks (including reverse repo)	Pre Haircut Post Haircut Pre Haircut Post Haircut Pre Haircut Pre Haircut Post Haircut	Quarterly/	USD \$MM USD \$MM USD \$MM USD \$MM USD \$MM USD \$MM	7,994 0 0 0	2,800 0 0 0	8,586 0 0 0	See Explanatory Note from 4.1	
4.3.1	Cash deposited at a central bank of issue of the currency concerned Cash deposited at other central banks Secured cash deposited at commercial banks (including reverse repo) Unsecured cash deposited at commercial banks	Pre Haircut Post Haircut Pre Haircut Post Haircut Pre Haircut Pre Haircut Post Haircut Pre Haircut	Quarterly/	USD \$MM	7,994 0 0 0 0 0 521	2,800 0 0 0 0 0	8,586 0 0 0 0	See Explanatory Note from 4.1 See Explanatory Note from 4.1	
4.3.1 4.3.2 4.3.3 4.3.4	Cash deposited at a central bank of issue of the currency concerned Cash deposited at other central banks Secured cash deposited at commercial banks (including reverse repo) Unsecured cash deposited at commercial banks	Pre Haircut Post Haircut Pre Haircut Post Haircut Pre Haircut Post Haircut Post Haircut Post Haircut Pre Haircut	Quarterly/	USD \$MM	7,994 0 0 0 0 0 521 521	2,800 0 0 0 0 0 346 346	8,586 0 0 0 0 0 820 820		
4.3.1 4.3.2 4.3.3 4.3.4	Cash deposited at a central bank of issue of the currency concerned Cash deposited at other central banks Secured cash deposited at commercial banks (including reverse repo) Unsecured cash deposited at commercial banks	Pre Haircut Post Haircut Pre Haircut Post Haircut Pre Haircut Post Haircut Post Haircut Pre Haircut Pre Haircut Pre Haircut Post Haircut	Quarterly/	USD \$MM	7,994 0 0 0 0 0 521 521 1,390	2,800 0 0 0 0 0 346 346 867	8,586 0 0 0 0 0 820 820 2,000		
4.3.1 4.3.2 4.3.3 4.3.4 4.3.4.2	Cash deposited at a central bank of issue of the currency concerned Cash deposited at other central banks Secured cash deposited at commercial banks (including reverse repo) Unsecured cash deposited at commercial banks Unsecured cash invested in Money Market Mutual Funds	Pre Haircut Post Haircut Pre Haircut Post Haircut Pre Haircut Post Haircut Pre Haircut Post Haircut Post Haircut Post Haircut Pre Haircut Post Haircut	Quarterly/	USD \$MM	7,994 0 0 0 0 521 521 1,390	2,800 0 0 0 0 346 346 867	8,586 0 0 0 0 820 820 2,000 2,000	See Explanatory Note from 4.1	
4.3.1 4.3.2 4.3.3 4.3.4 4.3.4.2	Cash deposited at a central bank of issue of the currency concerned Cash deposited at other central banks Secured cash deposited at commercial banks (including reverse repo) Unsecured cash deposited at commercial banks Unsecured cash invested in Money Market Mutual Funds	Pre Haircut Post Haircut Pre Haircut Post Haircut Pre Haircut Post Haircut Pre Haircut Post Haircut Post Haircut Post Haircut Pre Haircut Pre Haircut Pre Haircut Pre Haircut	Quarterly/	USD \$MM	7,994 0 0 0 0 521 521 1,390 1,390 0	2,800 0 0 0 0 346 346 867 867	8,586 0 0 0 0 820 820 2,000 2,000	See Explanatory Note from 4.1	
4.3.1 4.3.2 4.3.3 4.3.4 4.3.4.2 4.3.4.3	Cash deposited at a central bank of issue of the currency concerned Cash deposited at other central banks Secured cash deposited at commercial banks (including reverse repo) Unsecured cash deposited at commercial banks Unsecured cash invested in Money Market Mutual Funds Unsecured cash invested in US Treasury Bills	Pre Haircut Post Haircut Pre Haircut Post Haircut Pre Haircut Post Haircut Pre Haircut Post Haircut Post Haircut Pre Haircut Pre Haircut Post Haircut Post Haircut Post Haircut Post Haircut	Quarterly/	USD \$MM	7,994 0 0 0 0 521 521 1,390 1,390 0 0	2,800 0 0 0 0 346 346 867 867 0	8,586 0 0 0 0 820 820 2,000 2,000 0	See Explanatory Note from 4.1 See Explanatory Note from 4.1	

Disclosure	Disclosure Description	Frequency	Data Type	F	ICC	NSCC	Explanatory Notes	
Reference	Disclosure Description	Frequency	Бата Туре	GSD	MBSD	NSCC	Explanatory Notes	
Disclosu	re 4.3 - Value of pre-funded default resources (excluding initi	al and retained variation margin) held	d for each clearing se	rvice - Cont'd				
126			1 0 1 1					
4.3.6	Non-Cash Sovereign Government Bonds - Other	Pre Haircut	Quarterly/ Quarter End	USD \$MM	U	0	0	
		Post Haircut	Quarter Liiu	USD \$MM	0	0	0	
4.3.7	7 Non-Cash Agency Bonds	Pre Haircut		USD \$MM	2,531	866	0	See Explanatory Note from 4.1
		Post Haircut		USD \$MM	2,354	805	0	
4.3.8	Non-Cash State/municipal bonds	Pre Haircut		USD \$MM	0	0	0	
		Post Haircut		USD \$MM	0	0	0	
4.3.9	Non-Cash Corporate bonds	Pre Haircut		USD \$MM	0	0	0	
		Post Haircut		USD \$MM	0	0	0	
4.3.10	Non-Cash Equities	Pre Haircut		USD \$MM	0	0	0	
		Post Haircut		USD \$MM	0	0	0	
4.3.11	Non-Cash Commodities - Gold	Pre Haircut		USD \$MM	0	0	0	
		Post Haircut		USD \$MM	0	0	0	
4.3.12	Non-Cash Commodities - Other	Pre Haircut		USD \$MM	0	0	0	
		Post Haircut		USD \$MM	0	0	0	
4.3.13	Non-Cash Commodities - Mutual Funds / UCITs	Pre Haircut		USD \$MM	0	0	0	
	Post Haircut		USD \$MM	0	0	0		
4.3.14	Non-Cash Commodities - Other	Pre Haircut		USD \$MM	0	0	0	
		Post Haircut		USD \$MM	0	0	0	

isclosu	re 4.4 - Credit Risk Disclosures							
4.4.1	State whether the CCP is subject to a minimum "Cover 1" or "Cover 2" requirement in relation to total pre-funded default resources.		Quarterly		Cover 1	Cover 1	Cover 1	
4.4.2	For each clearing service, state the number of business days within which the CCP assumes it will close out the default when calculating credit exposures that would potentially need to be covered by the default fund.			Bus. Days	3	3	3	This is our risk horizon for liquidation and hedging of market risk.
4.4.3	For each clearing service, the estimated largest aggregate stress loss (in excess of initial margin) that would be caused by the default of any single participant and its affiliates (including	Peak Day/ Previous 12 Months		USD \$MM	6,069	2,486	2,440	Amounts correspond to largest Cover 1 ratio
	transactions cleared for indirect participants) in extreme but plausible market conditions. (Previous 12 Months)	Mean Avg/ Previous 12 Months		USD \$MM	1,682	3,184	418	In October 2020, a rule filing related to MBSD's stress testing program was approved by regulators, henceforth MBSD results from October onwards are derived from a model that includes changes described in the rule filing. MBSD ST results are the combined average of output before and after the described changes.
4.4.4	Report the number of business days, if any, on which the above amount (4.4.3) exceeded actual pre-funded default resources (in excess of initial margin).			Bus. Days	0	0	0	·
4.4.5	The amount in 4.4.3 which exceeded actual pre-funded default resources (in excess of initial margin) (Previous 12 Months)	Amt Exceeded/ Previous 12 Months		USD \$MM	0	0	0	
4.4.6	For each clearing service, the actual largest aggregate credit exposure (in excess of initial margin) to any single participant and its affiliates (including transactions cleared for indirect	Peak Day/ Previous 12 Months		USD \$MM	1	3	928	Amount represents Peak/Average VaR model back test results.
	participants) (Previous 12 Months)	Avg/ Previous 12 Months		USD \$MM	0	1	35	
4.4.7	For each clearing service, the estimated largest aggregate stress loss (in excess of initial margin) that would be caused by the default of any two participants and their affiliates	Peak Day/ Previous 12 Months		USD \$MM	7,370	3,532	2,733	Amounts correspond to largest Cover 2 ratio
	(including transactions cleared for indirect participants) in extreme but plausible market conditions (Previous 12 Months)	Mean Avg/ Previous 12 Months		USD \$MM	2,558	5,449	568	In October 2020, a rule filing related to MBSD's stress testing program was approved by regulators, henceforth MBSD results from October onwards are derived from a model that includes changes described in the rule filing. MBSD ST results are the combined average of output before and after the described changes.
4.4.8	Number of business days, if any, on which the above amount (4.4.7) exceeded actual pre-funded default resources (in excess of initial margin) and by how			Bus. Days	0	0	0	Total number of business days where the largest Cover 2 ratio per day exceeded 100% for the last 12 months of this test period. Excess amounts above pre-funded default resources (in excess of initial

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margin) corresponding to these business days are referenced below in 4.4.9 explanatory notes.

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CF IVII-I	105CO Quantitative Disclosures - DTCC							As of June 30, 2021
Disclosure Reference	Disclosure Description		Frequency	Data Type	GSD	FICC MBSD	NSCC	Explanatory Notes
Disclosu	re 4.4 - Credit Risk Disclosures - Cont'd							
4.4.9	The amount in 4.4.7 which exceeded actual pre-funded default resources (in excess of initial margin) (Previous 12 Months)	Amt Exceeded/ Previous 12 Months	Quarterly	USD \$MM	0	0	0	For MBSD ,the largest excess amount above actual pre-funded default resources (in excess of initial margin) was \$887M, corresponding to the peak day reported under 4.4.7, above, and the subsequent excess amounts were \$122M and \$50M for the last 12 months of this reporting period.
4.4.10	For each clearing service, what was the actual largest aggregate credit exposure (in excess of initial margin) to any two participants and their affiliates (including	Peak Day/ Previous 12 Months		USD \$MM	1	6	1,365	Amount represents Peak/Average VaR model back test results.
		Avg/ Previous 12 Months		USD \$MM	0	1	48	
Disclosu	re 5.1 - Assets eligible as initial margin, and the respective haircuts applied							
5.1.1	Assets eligible as initial margin and the respective haircuts applied		Update as changes are made	Website/ Hyperlink	.com/~/media/Fi es/Downloads/le	il .com/~/media/Fi es/Downloads/le gal/rules/ficc_mb sd_rules.pdf Section: "SCHEDULE OF HAIRCUTS FOR ELIGIBLE	thttp://www.dtcc il .com/~/media/Fil e es/Downloads/le gal/rules/nscc_ru les.pdf Section: "PROCEDURE XV", "III. Collateral Value of Eligible Clearing Fund Securities"	
Disclosu	re 5.2 - Assets Eligible for pre-funded participant contributions to the default	resources, and the resp	ective haircuts app	lied (if differe	nt from 5.1)			
5.2.1	Assets Eligible for pre-funded participant contributions to the default resources, and the respect different from 5.1)	ctive haircuts applied (if	Update as changes are made		See 5.1 above	See 5.1 above	See 5.1 above	
Disclosu	re 5.3 - Results of testing of haircuts							
5.3.1	Confidence interval targeted through the calculation of haircuts		Quarterly	Percentage	99%	99%	99%	
5.3.2	Assumed holding/liquidation period for the assets accepted			Bus. Days	3 Days	3 Days	3 Days	See Explanatory Note from 4.4.2
5.3.3	Look-back period used for testing the haircuts				10+ years	10+ years	10+ years	For Treasury and Agencies the lookback period, "10+ years", starts Jan 1, 2008 and continues to the las day of this quarter tested & reported herewith. Similar to current scenario selection or retention approach, where Historic Stress Scenario Dates are selected from a timespan of more than 10 years (utilizing a fixed start date and extending the end date), or retained for all Historic Scenario Dates previously derived which are on or after Jan 1, 2008. For Mortgages, Historic Stress Scenarios are selected from a 10+ years look-back period starting in 2002 and applied to CUSIPs selected from the 3 months of the quarterly test period.
5.3.4	Number of days during the look-back period on which the fall in value during the assumed hold exceeded the haircut on an asset.	ling/liquidation period		Bus. Days	Treasury total of 19 days. Mortgages total of 63 days. Agency 0 days.	Treasury total of 19 days. Mortgages total of 63 days. Agency 0 days.	Treasury total of 19 days. Mortgages total of 63 days. Agency 0 days.	See 5.1 for list of eligible assets and the respective haircuts applied. For Treasuries, based on the "10+ years" lookback period (including 2008 and onward), 4 days for 20 yrs. and 19 days for 30 yrs. tenors were observed, where a change in rate caused a breach of respective HC. The total day count for Treasuries is 19 (of which 4 days caused a breach for both tenors, 20 & 30 yrs.). For Mortgages there were 63 days in Q2 2021 where at least one breach occurred. In total, the stress return (loss) for 11 CUSIPs under two historic stress scenarios breached the current HC. For Agencies no breaches were observed under current HCs.

PINII-I	OSCO Quantitative Disclosures - DTCC							As of June 30, 2021		
isclosure	Disclosure Description		Frequency	Data Type	F	ICC	NSCC	Explanatory Notes		
eference				Buta Type	GSD	MBSD	Noce	Explanatory notes		
Disclosu	e 6.1 - Total initial margin required split by house, client gross, client net and	total (if not segregated)							
6.1.1	Total initial margin required split by house, client gross, client net and total (if not segregated)	House (Net)	Quarterly	USD \$MM	18,912	13,750	11,492	See Explanatory Note from 4.1.4		
		Client (Gross)		USD \$MM	n/a ¹	n/a¹	n/a¹			
		Client (Net)		USD \$MM	n/a¹	n/a¹	n/a¹	¹ Not applicable. GSD/MBSD/NSCC does not hold client margin. See NSCC/FICC's Disclosure		
		Total		USD \$MM	18,912	13,750	11,492	Frameworks, Principle 14 discussion.		
sclosure 6.2 - For each clearing service, total initial margin required, split by house and client (or combined total if not segregated) Not applicable. GSD/MBSD/NSCC does not hold client margin. See NSCC/FICC's Disclosure Frameworks, Principle 14 discussion. For aggregate numbers, see 6.1.1 above.										
Disclosure 6.3 - Initial Margin rates on individual contracts, where the CCP sets such rates										
6.3.1	Initial Margin rates on individual contracts where the CCP sets such rates		Update as changes are made		n/a	n/a	n/a			
sclosu	e 6.4 - Type of initial margin model used (e.g. portfolio simulation or risk aggr	egation) for each cleari	ing service and the	key model desi	gn parameters fo	or each initial mar	gin model applie	ed to that clearing service		
6.4.1	.,	service and the key model	Update as changes		Historical	Historical	Parametric			
	design parameters for each initial margin model applied to that clearing service		are made		Simulation + Haircut	Simulation + Haircut	VaR + Haircut			
						110.110.11				
isclosu	e 6.5 - Results of back-testing of initial margin. At a minimum, this should inc	ude, for each clearing s	service and each in	itial margin mod	del applied to the	at clearing service				
6.5.1	Number of times over the past twelve months that margin coverage held against any account	Once-a-day/	Quarterly	Count	75	24	100			
	fell below the actual marked-to-market exposure of that member account – based on daily back-testing results	Previous 12 Months								
	back-testing results									
6.5.2	Number of observations ([Number of accounts * number of days])	Previous 12 Months		Count	28,933	15,768	31,525			
6.5.3	Achieved coverage level [aggregate CCP-level backtest coverage]	Previous 12 Months		Percentage	99.7%	99.8%	99.7%			
6.5.4	Where breaches of initial margin coverage (as defined in 6.5(a)) have occurred, report on size	Peak Size/		USD \$MM	139	34	1,061			
	of uncovered exposure	Previous 12 Months					ŕ			
6.5.5	Where breaches of initial margin coverage (as defined in 6.5(a)) have occurred, report on size	Average Size/		USD \$MM	12	3	27			
	of uncovered exposure	Previous 12 Months								
sclosu	re 6.6 - Average Total Variation Margin Paid to the CCP by participants each be	usiness								
6.6.1	Average Total Variation Margin Paid to the CCP by participants each business day	Average	Quarterly	USD \$MM	3,112	1,584	674	For GSD, VM is a cash pass-through process across the members; for MBSD and NSCC, VM charges a		
								included as part of the Clearing Fund requirements.		
								MTM debits were aggregated across all members to reflect the variation margin paid to all members		
a al a se	C.7. Maximum total variation mayning that the CCD	dan anandi a manta 1								
isciosui	e 6.7 - Maximum total variation margin paid to the CCP on any given business	aay over the period								
6.7.1	Maximum total variation margin paid to the CCP on any given business day over the period	Maximum	Quarterly	USD \$MM	5,598	5,924	3,057	See Explanatory Note from 6.6		

Disclosure					FICC			
Reference	Disclosure Description	Frequency	Data Type	GSD	MBSD	NSCC	Explanatory Notes	
		Marana di Sala			GSD	INIR2D		
Disclosu	re 6.8 - Maximum aggregate initial margin call on any given business day over	tne period						
6.8.1	Maximum aggregate initial margin call on any given business day over the period	Maximum	Quarterly	USD \$MM	3,752	2,661	3,837	Amount represents the largest aggregate deficit over amounts on deposit. This is the actual call made, to be reduced by any excess collateral that was held. Call amount would be inclusive of any intraday calls made.
Disclosu	re 7.1 - Liquidity Risk							
7.1.1	State whether the clearing service maintains sufficient liquid resources to 'Cover 1' or 'Cover 2'.		Quarterly/ Quarter End		Cover 1	Cover 1	Cover 1	
7.1.2	the currency concerned			USD \$MM	7,994	2,800	14,579	
7.1.3	Size and composition of qualifying liquid resources for each clearing service; (b) Cash deposited	at other central banks		USD \$MM	0	0	0	
7.1.4	Size and composition of qualifying liquid resources for each clearing service; (c) Secured cash deposited at commercial banks (including reverse repo)	Repo Only		USD \$MM	0	0	0	
7.1.5	Size and composition of qualifying liquid resources for each clearing service; (d) Unsecured cash deposited at commercial banks	Commercial Bank Deposits		USD \$MM	521	346	2,865	
		Money Market Funds		USD \$MM	1,390	867	2,000	
		US Treasury Bills		USD \$MM	0	0	0	
7.1.6	Size and composition of qualifying liquid resources for each clearing service; (e) secured committed lines of credit (ie those for which collateral/security will be provided by the CCP if drawn) including committed foreign exchange swaps and committed repos			USD \$MM	82,514	79,139	9,300	For FICC, amount represents a the assigned total amount of rules-based facility, Capped Contingency Liquidity Facility ("CCLF") for the period ending June 30. For NSCC, the amount represents a secured lin of credit with a syndicate of lenders.
7.1.7	Size and composition of qualifying liquid resources for each clearing service; (f) unsecured common the CCP may draw without providing collateral/security)	nitted lines of credit (ie which		USD \$MM	n/a	n/a	n/a	
7.1.8	Size and composition of qualifying liquid resources for each clearing service; (g) highly marketat and investments that are readily available and convertible into cash with prearranged and highly arrangements even in extreme but plausible market conditions	,		USD \$MM	17,529	12,111	1,111	Amounts include Clearing Fund securities.
7.1.9	Size and composition of qualifying liquid resources for each clearing service; (h) other			USD \$MM	0	0	0	For GSD and MBSD, the portfolio of a defaulting member comprised of highly marketable collateral would also be available as a liquidity resource. Value and composition of that portfolio would vary by day and by member. At quarter end, GSD observed 79,057mm and MBSD observed 2,272mm in repo value of Underlying Securities. 6/30/21 was not an MBSD class-settlement day.
								NSCC's Supplemental Liquidity Deposit ("SLD") program provides for additional rules-based liquidity resources. As of 6/30/21 there were no SLD deposits on hand. Please see Supplemental Note for additional information.
								Resources reported in Section 7.1 are as of 6/30/21 and do not correspond to the dates of the actual largest obligations.
7.1.10	State whether the CCP has routine access to central bank liquidity or facilities.				n/a	n/a	n/a	
7.1.11	Details regarding the schedule of payments or priority for allocating payments, if such exists, an procedure, and governance arrangement around such decision making.	d any applicable rule, policy,			n/a	n/a	n/a	

CF WIII-IN	OSCO Quantitative Disclosures - DTCC						As of June 30, 2021
Disclosure Reference	Disclosure Description	Frequency	Data Type	GSD F	ICC MBSD	NSCC	Explanatory Notes
Disclosur	re 7.2 - Size and composition of any supplementary liquidity risk resources for each clearing service ab	ove those qualify	ing liquid resou	urces above.			
7.2.1	Size and composition of any supplementary liquidity risk resources for each clearing service above those qualifying liquid resources in 7.1	Quarterly/ Quarter End	USD \$MM	GSD can use collateralized loans from clearing banks as additional liquidity resources.	from clearing banks as additional	NSCC can use collateralized loans/equity repo utilizing the cash market securities that were destined to defaulter as collateral.	
Disclosur	re 7.3 - Liquidity Risk						
7.3.1	Estimated largest same-day and, where relevant, intraday and multiday payment obligation in total that would be caused by the default of any single participant and its affiliates (including transactions cleared for indirect participants) in extreme but plausible market conditions	Forward looking/ Quarterly	USD \$MM	71,404	54,346	35,977	For GSD and MBSD, values are estimated liquidity obligations post netting that are based on trades that are due to settle the following business day. For NSCC, values are estimated liquidity obligations that are based on multi-day obligations throughout the (T+2) settlement cycle plus the Long Allocation and CALM offsets.
7.3.2 7.3.3	Number of business days, if any, on which the above amount exceeded its qualifying liquid resources (identified as in 7.1, and available at the point the breach occurred), and by how much.	Quarterly	Bus. Days USD \$MM	0	0	2 5.127	See Supplemental Note
7.3.4	Actual largest intraday and multiday payment obligation of a single participant and its affiliates (including transactions cleared for indirect participants) over the past twelve months; Peak day amount in previous twelve months	Previous 12 Months	USD \$MM	103,190	47,444	16,898	GSD/MBSD/NSCC did not utilize any of its liquidity resources to cover any member payment obligations. NSCC reflects multi-day settlement obligations. GSD obligations that are based on trades that are due to settle the following business day. MBSD obligations are based on bilateral trades due to settle the next business day.
7.3.5	Estimated largest same-day and, where relevant, intraday and multiday payment obligation in each relevant currency that would be caused by the default of any single participant and its affiliates (including transactions cleared for indirect participants) in extreme but plausible market conditions	Forward looking/ Quarterly	USD \$MM	71,404	54,346	35,977	See Explanatory Note from 7.3.1
7.3.6 7.3.7	Number of business days, if any, on which the above amounts exceeded its qualifying liquid resources in each relevant currency (as identified in 7.1 and available at the point the breach occurred), and by how much	Quarterly	Bus. Days USD \$MM	0	0	2 5.127	See Supplemental Note
Disclosur	re 12.1 - Percentage of settlements by value effected using a DvP, DvD or PvP settlement mechanism						
	Percentage of settlements by value effected using a DvP settlement mechanism	Quarterly	Percentage	100%	100%	100%	FICC data provided with respect to GSD GCF Repo and non-GCF Repo CCP services and MBSD clearing services.
	Percentage of settlements by value effected using a DvD settlement mechanism		Percentage	n/a	n/a	n/a	NSCC data provided with respect to CNS, NSCC's CCP service, which uses a model 2 DvP Settlement
12.1.3	Percentage of settlements by value effected using a PvP settlement mechanism		Percentage	n/a	n/a	n/a	mechanism.
Disclosur	re 12.2 - Percentage of settlements by volume effected using a DvP, DvD or PvP settlement mechanism	n					
12.2.1	Percentage of settlements by volume effected using a DvP settlement mechanism	Quarterly	Percentage	100%	100%	100%	FICC data provided with respect to GSD GCF Repo and non-GCF Repo CCP services and MBSD clearing services.
12.2.2	Percentage of settlements by volume effected using a DvD settlement mechanism		Percentage	n/a	n/a	n/a	NSCC data provided with respect to CNS, NSCC's CCP service, which uses a model 2 DvP Settlement
12.2.3	Percentage of settlements by volume effected using a PvP settlement mechanism		Percentage	n/a	n/a	n/a	mechanism.

Disclosure	Dicologura Description	Fraguancy	Data Type	F	FICC		Explanatory Notes					
Reference	Disclosure Description	Frequency	Data Type	GSD	MBSD	NSCC	Explanatory Notes					
Disclosu	re 13.1 - Quantitative information related to defaults											
13.1.1	Quantitative information related to defaults; Amount of loss versus amount of initial margin	Ad-hoc		n/a	n/a	n/a						
13.1.2	Quantitative information related to defaults; Amount of other financial resources used to cover losses			n/a	n/a	n/a						
13.1.3	Quantitative information related to defaults; Proportion of client positions closed-out/ported			n/a	n/a	n/a						
13.1.4	Quantitative information related to defaults; Appropriate references to other published material related to the defaults			n/a	n/a	n/a						
Disclosu	Disclosure 14.1 - Total Client Positions held as a share of notional values cleared or of the settlement value of securities transactions											
14.1.1	Total Client Positions held in individually segregated accounts	Quarterly/ Quarter End		n/a	n/a	n/a	Not applicable. GSD/MBSD/NSCC does not maintain separate "house" and "client" accounts for its Members. See NSCC/FICC's Disclosure Frameworks, Principle 14 discussion.					
14.1.2	Total Client Positions held in omnibus client-only accounts, other than LSOC accounts			n/a	n/a	n/a						
14.1.3	Total Client Positions held in legally segregated but operationally comingled (LSOC) accounts			n/a	n/a	n/a						
14.1.4	Total Client Positions held in comingled house and client accounts			n/a	n/a	n/a						
Disclosu	re 15.1 - General business risk						Values representative of the 2020 Annual Audited Financial Statements. Values will remain static until publication of the 2021 Annual Audited Financial Statements (Q4 2021).					
15.1.1	Value of liquid net assets funded by equity	Annual	USD \$MM	з	01	620						
15.1.2	Six months of current operating expenses		USD \$MM	1	30	190						
Disclosu	re 15.2 - General business risk; Financial Disclosures						Values representative of the 2020 Annual Audited Financial Statements. Values will remain static until publication of the 2021 Annual Audited Financial Statements (Q4 2021).					
15.2.1	Total Revenue	Annual	USD \$MM	2	97	515.5						
15.2.2	Total Expenditure		USD \$MM	2	72	391.3						
15.2.3	Profits		USD \$MM		25	124.2						
15.2.4	Total Assets		USD \$MM	47	47,385							
15.2.5	Total Liabilities		USD \$MM	47	47,047							
15.2.6	Explain if collateral posted by clearing participants is held on or off the CCP's balance sheet				ral is held nce Sheet	Collateral is held on Balance Sheet						
15.2.7	Additional items as necessary		USD \$MM	r	/a	n/a						
		<u> </u>	1	<u> </u>		1						

AS OF June 4											
Disclosure Reference	Disclosure Description	Frequency	Data Type	GSD	MBSD	NSCC	Explanatory Notes				
Disclosu	re 15.3 - General business risk; Income breakdown						Values representative of the 2020 Annual Audited Financial Statements. Values will remain static until publication of the 2021 Annual Audited Financial Statements (Q4 2021).				
15.3.1	Percentage of total income that comes from fees related to provision of clearing services	Annual	Percentage	99	9.9%	98.8%					
15.3.2	Percentage of total income that comes from the reinvestment (or rehypothecation) of assets provided by clearing participants		Percentage		n/a	n/a					
Disclosu	re 16.1 - Total cash (but not securities) received from participants, regardless of the form in which it is	held, deposited of	or invested, split	by whether it w	as received as ini	itial margin or de	efault fund contribution				
16.1.1	Total cash (but not securities) received from participants, regardless of the form in which it is held, deposited or invested, received as initial margin	Quarterly/ Quarter End	USD \$MM	9,905	4,013	11,406	See Explanatory Note from 4.1				
16.1.2	Total cash (but not securities) received from participants, regardless of the form in which it is held, deposited or invested, received as default fund contribution		USD	n/a	n/a	n/a					
Disclosu	re 16.2 - How total cash received from participants (16.1) is held/deposited/invested, including;										
16.2.1	Percentage of total participant cash held as cash deposits (including through reverse repo)	Quarterly/ Quarter End	Percentage	100%	100%	100%					
16.2.2	Percentage of total participant cash held as cash deposits (including through reverse repo); as cash deposits at central banks of issue of the currency deposited	Quarter Enu	Percentage	81%	70%	75%					
16.2.3	Percentage of total participant cash held as cash deposits (including through reverse repo); as cash deposits at other central banks		Percentage	0%	0%	0%					
16.2.4	Percentage of total participant cash held as cash deposits (including through reverse repo); as cash deposits at commercial banks (Secured, including through reverse repo)		Percentage	0%	0%	0%					
16.2.5			Percentage	5%	9%	7%					
16.2.6	Percentage of total participant cash held as cash deposits (including through reverse repo); in money market funds		Percentage	14%	22%	18%					
16.2.7	Percentage of total participant cash held as cash deposits (including through reverse repo); in other forms		Percentage	0%	0%	0%					
16.2.8	Percentage of total participant cash held as cash deposits (including through reverse repo); percentage split by currency of these cash deposits (including reverse repo) and money market funds by CCY; Specify local currency in comments		Percentage	100%	100%	100%					
16.2.9	Percentage of total participant cash held as cash deposits (including through reverse repo); weighted average maturity of these cash deposits (including reverse repo) and money market funds		Bus. Days	1	1	1					
16.2.10	Percentage of total participant cash invested in securities; Domestic sovereign government bonds		Percentage	0%	1%	0%					
16.2.11	Percentage of total participant cash invested in securities; Other sovereign government bonds		Percentage	0%	0%	0%					
16.2.12	Percentage of total participant cash invested in securities; Agency Bonds		Percentage	0%	0%	0%					
16.2.13	Percentage of total participant cash invested in securities; State/municipal bonds		Percentage	0%	0%	0%					
16.2.14	Percentage of total participant cash invested in securities; Other instruments		Percentage	0%	0%	0%					
16.2.15	Percentage of total participant cash invested in securities; percentage split by currency of these securities; Specify local currency in comments;		Percentage	0%	1%	0%					
16.2.16	Percentage of total participant cash invested in securities; weighted average maturity of securities; Specify local currency in comments;		Bus. Days	0	0	0					
16.2.17	Provide an estimate of the risk on the investment portfolio (excluding central bank and commercial bank deposits) (99% one-day VaR, or equivalent)		USD \$MM	<1	<1	<1					
16.2.18	· · · · ·			Yes	Yes	Yes	Size of limits will vary depending on credit rating and other factors.				
16.2.19	, ,		Count	0	0	0					

Disclosure						00		
Reference	Disclosure Description		Frequency	Data Type		CC	NSCC	Explanatory Notes
					GSD	MBSD		
Disclosu	re 16.3 - Rehypothecation of participant assets (ie non-cash)							
16.3.1	Total value of participant non-cash rehypothecated (Initial margin)		Quarterly/ Quarter End	USD \$MM	0	0	0	Rehypothecation used for liquidity purposes only in the event of a default.
16.3.2	Total value of participant non-cash rehypothecated (Default fund)		Quarter End	USD \$MM	0	0	0	
16.3.3	Rehypothecation of participant assets (ie non-cash) by the CCP where allowed; initial margin; over the following maturities:	ON_1D		USD \$MM	0	0	0	
		1D_1W		USD \$MM	0	0	0	
	Overnight/one day; one day and up to one week; One week and up to one month; One month and up to one year; One year and up to two years; Over two years	1W_1M		USD \$MM	0	0	0	
	and up to one year, one year and up to two years, over two years	1M_1Y		USD \$MM	0	0	0	
		1Y_2Y		USD \$MM	0	0	0	
		2Y+		USD \$MM	0	0	0	
16.3.4	Rehypothecation of participant assets (ie non-cash); default fund; over the following	ON_1D		USD \$MM	0	0	0	
	maturities:	1D_1W		USD \$MM	0	0	0	
	Overnight/one day; one day and up to one week; One week and up to one month; One month and up to one year; One year and up to two years; Over two years	1W_1M		USD \$MM	0	0	0	
	and up to one year, one year and up to two years, over two years	1M_1Y		USD \$MM	0	0	0	
		1Y_2Y		USD \$MM	0	0	0	
		2Y+		USD \$MM	0	0	0	
	Operational availability target for the core system(s) involved in clearing (whether or not outsourced) over specified period for the system							This target and the actual results below are calculated at the individual product-line level and then averaged across all of the systems identified below, in accordance with the established calculation for
							1	the applicable SLA.
Disclosu	re 17.2 - Actual availability of the core system(s) over the previous twelve mo	nth period						tne applicable SLA.
	re 17.2 - Actual availability of the core system(s) over the previous twelve mo Actual availability of the core system(s) over the previous twelve month period	nth period	Quarterly	Percentage		99.90%		Availability is calculated across A14multiple systems. Specifically, CMU, CNS, Risk Management, GSD,
		nth period	Quarterly	Percentage		99.90%		Availability is calculated across A14multiple systems. Specifically, CMU, CNS, Risk Management, GSD,
17.2.1		nth period	Quarterly	Percentage		99.90%		Availability is calculated across A14multiple systems. Specifically, CMU, CNS, Risk Management, GSD, MBSD and Trade Capture. Since Risk Management is across FICC and NSCC, actual availability cannot
17.2.1	Actual availability of the core system(s) over the previous twelve month period	nth period	Quarterly	Percentage		99.90%		Availability is calculated across A14multiple systems. Specifically, CMU, CNS, Risk Management, GSD, MBSD and Trade Capture. Since Risk Management is across FICC and NSCC, actual availability cannot
17.2.1	Actual availability of the core system(s) over the previous twelve month period		Quarterly Quarterly	Percentage Count / hh:mm:ss		99.90%		Availability is calculated across A14multiple systems. Specifically, CMU, CNS, Risk Management, GSD, MBSD and Trade Capture. Since Risk Management is across FICC and NSCC, actual availability cannot captured at the individual entity level. Actual availability is across all three in total. Regulation Systems Compliance and Integrity (Regulation SCI) events for NSCC, GSD, and MBSD over previous twelve month period are reviewed for Disclosure 17.3 reporting. Regulation SCI events that impact core systems used in clearing that enable the acceptance and novation of trades, and enable calculation of margin and settlement obligations are assessed by Risk Management, Product Management, Regulation SCI personnel, and Legal to confirm total number of incidents and duration failures. Incidents that do not result in a direct business impact to clients are not reported as a failure.
17.2.1 Disclosu 17.3.1	Actual availability of the core system(s) over the previous twelve month period re 17.3 - Total number of failures Total number of failures and duration affecting the core system(s) involved in clearing over the			Count /				Availability is calculated across A14multiple systems. Specifically, CMU, CNS, Risk Management, GSD, MBSD and Trade Capture. Since Risk Management is across FICC and NSCC, actual availability cannot captured at the individual entity level. Actual availability is across all three in total. Regulation Systems Compliance and Integrity (Regulation SCI) events for NSCC, GSD, and MBSD over previous twelve month period are reviewed for Disclosure 17.3 reporting. Regulation SCI events that impact core systems used in clearing that enable the acceptance and novation of trades, and enable calculation of margin and settlement obligations are assessed by Risk Management, Product Management, Regulation SCI personnel, and Legal to confirm total number of incidents and duration failures. Incidents that do not result in a direct business impact to clients are not reported as a failur for Disclosure 17.3. File processing delays caused FICC Clearing Fund Requirements to miss the client
17.2.1 Disclosu 17.3.1	Actual availability of the core system(s) over the previous twelve month period re 17.3 - Total number of failures Total number of failures and duration affecting the core system(s) involved in clearing over the period (Duration of Failure) re 17.4 - Recovery time objective(s)			Count /	Within 2 Hours		Within 2 Hours	Availability is calculated across A14multiple systems. Specifically, CMU, CNS, Risk Management, GSD, MBSD and Trade Capture. Since Risk Management is across FICC and NSCC, actual availability cannot captured at the individual entity level. Actual availability is across all three in total. Regulation Systems Compliance and Integrity (Regulation SCI) events for NSCC, GSD, and MBSD over 1 previous twelve month period are reviewed for Disclosure 17.3 reporting. Regulation SCI events that impact core systems used in clearing that enable the acceptance and novation of trades, and enable to calculation of margin and settlement obligations are assessed by Risk Management, Product Management, Regulation SCI personnel, and Legal to confirm total number of incidents and duration failures. Incidents that do not result in a direct business impact to clients are not reported as a failure for Disclosure 17.3. File processing delays caused FICC Clearing Fund Requirements to miss the client

Disclosure	Disalassina Dassination		Francisco	Data Tura	FICC		NECC	Evaluatory Notes
eference	Disclosure Description		Frequency	Data Type	GSD	MBSD	NSCC	Explanatory Notes
Disclosu	re 18.1 - Number of clearing members, by clearing service							For GSD, there are Broker/Dealers, Government Sponsored Entities, Banks, and Hedge Funds For MBSD, there are Broker/Dealers, Hedge Fund, Mortgage Companies, Government Sponsored Entities, Registered Investment Companies, etc. For NSCC there are Broker/Dealers, certain stock exchanges (for omnibus account reporting), and one CSD.
18.1.1.1	Number of general clearing members		Quarterly/ Quarter End	Count	134	76	64	FICC does not distinguish membership categories between members that clear for others and self- clearing. Accordingly, the total number of FICC members are reported here.
18.1.1.2	Number of direct clearing members			Count	0	0	83	
18.1.1.3	Number of others category (Describe in comments)			Count	0	0	0	Numbers do not include types of members that are not eligible for CCP services: GSD Comparison-Only members, MBSD Electronic Pool Notification (EPN)-only members, and NSCC has several limited membership categories that are not reported here.
18.1.2.1	Number of central bank participants			Count	0	0	0	
18.1.2.2	Number of CCP participants			Count	0	0	0	
18.1.2.3	Number of bank participants			Count	45	16	13	
18.1.2.4	Number of other participants (Describe in comments)			Count	89	60	134	Includes Broker/dealers, Stock Exchanges, CSD's and Trust members. Excludes Banks.
18.1.3.1	Number of domestic participants			Count	90	73	145	
18.1.3.2	Number of foreign participants			Count	44	3	2	US Branches/Agencies of Non US legal entities will be considered Non-US (foreign)
Disclosu	re 18.2 - Open Position Concentration							
18.2.1		Average End of Day	Quarterly	Percentage	n/a	n/a	n/a	
	of open positions held by the largest five clearing members, including both house and client, in aggregate	Peak End of Day						
18.2.2				Percentage	n/a	n/a	n/a	
10.2.2	For each clearing service with 25 or more members; Percentage of open positions held by the	Average End of Day		Percentage Percentage	n/a 24%	n/a 40%	n/a 36%	
10.2.2	For each clearing service with 25 or more members; Percentage of open positions held by the largest five clearing members, including both house and client, in aggregate	Average End of Day Peak End of Day						
18.2.3	largest five clearing members, including both house and client, in aggregate For each clearing service with 25 or more members; Percentage of open positions held by the	Peak End of Day Average End of Day		Percentage	24% 26% 40%	40% 43% 65%	36% 38% 56%	
	largest five clearing members, including both house and client, in aggregate	Peak End of Day		Percentage Percentage	24%	40%	36%	
18.2.3	largest five clearing members, including both house and client, in aggregate For each clearing service with 25 or more members; Percentage of open positions held by the	Peak End of Day Average End of Day		Percentage Percentage Percentage	24% 26% 40%	40% 43% 65%	36% 38% 56%	
18.2.3	largest five clearing members, including both house and client, in aggregate For each clearing service with 25 or more members; Percentage of open positions held by the largest ten clearing members, including both house and client, in aggregate re 18.3 - Initial Margin Concentration For each clearing service with ten or more members, but fewer than 25 members; Percentage	Peak End of Day Average End of Day	Quarterly	Percentage Percentage Percentage	24% 26% 40%	40% 43% 65%	36% 38% 56%	Under NSCC's and each of FICC Division's current rules and structure, they do not maintain separate Guaranty Funds NSCC and each FICC Division collect Clearing Fund denosits from their Members using
18.2.3 Disclosu	largest five clearing members, including both house and client, in aggregate For each clearing service with 25 or more members; Percentage of open positions held by the largest ten clearing members, including both house and client, in aggregate re 18.3 - Initial Margin Concentration	Peak End of Day Average End of Day Peak End of Day	Quarterly	Percentage Percentage Percentage Percentage	24% 26% 40% 42%	40% 43% 65% 68%	36% 38% 56% 57%	Guaranty Funds. NSCC and each FICC Division collect Clearing Fund deposits from their Members using a risk-based margin methodology. These amounts operate, individually, as the Member's margin, and
18.2.3 Disclosu	Iargest five clearing members, including both house and client, in aggregate For each clearing service with 25 or more members; Percentage of open positions held by the largest ten clearing members, including both house and client, in aggregate re 18.3 - Initial Margin Concentration For each clearing service with ten or more members, but fewer than 25 members; Percentage of initial margin posted by the largest five clearing members, including both house and client, in aggregate For each clearing service with 25 or more members; Percentage of initial margin posted by the	Peak End of Day Average End of Day Peak End of Day Average End of Day	Quarterly	Percentage Percentage Percentage Percentage Percentage	24% 26% 40% 42%	40% 43% 65% 68%	36% 38% 56% 57%	Guaranty Funds. NSCC and each FICC Division collect Clearing Fund deposits from their Members using
18.2.3 Disclosu 18.3.1	largest five clearing members, including both house and client, in aggregate For each clearing service with 25 or more members; Percentage of open positions held by the largest ten clearing members, including both house and client, in aggregate re 18.3 - Initial Margin Concentration For each clearing service with ten or more members, but fewer than 25 members; Percentage of initial margin posted by the largest five clearing members, including both house and client, in aggregate	Peak End of Day Average End of Day Peak End of Day Average End of Day Peak End of Day	Quarterly	Percentage Percentage Percentage Percentage Percentage Percentage	24% 26% 40% 42%	40% 43% 65% 68%	36% 38% 56% 57%	Guaranty Funds. NSCC and each FICC Division collect Clearing Fund deposits from their Members using a risk-based margin methodology. These amounts operate, individually, as the Member's margin, and the aggregate of all such Members' deposits* is referred to, collectively, as the Clearing Fund, which operates as NSCC's and each of FICC Division's default fund.
18.2.3 Disclosu 18.3.1	Iargest five clearing members, including both house and client, in aggregate For each clearing service with 25 or more members; Percentage of open positions held by the largest ten clearing members, including both house and client, in aggregate re 18.3 - Initial Margin Concentration For each clearing service with ten or more members, but fewer than 25 members; Percentage of initial margin posted by the largest five clearing members, including both house and client, in aggregate For each clearing service with 25 or more members; Percentage of initial margin posted by the	Peak End of Day Average End of Day Peak End of Day Average End of Day Peak End of Day Average End of Day Average End of Day	Quarterly	Percentage Percentage Percentage Percentage Percentage Percentage Percentage	24% 26% 40% 42% n/a n/a 33%	40% 43% 65% 68% n/a n/a 52%	36% 38% 56% 57% n/a n/a 31%	Guaranty Funds. NSCC and each FICC Division collect Clearing Fund deposits from their Members using a risk-based margin methodology. These amounts operate, individually, as the Member's margin, and the aggregate of all such Members' deposits* is referred to, collectively, as the Clearing Fund, which

isclosure				F	ICC			
eference	Disclosure Description	Frequency	Data Type	GSD	MBSD	NSCC	Explanatory Notes	
	re 18.4 - Segregated Default Fund Concentration			435	MIDSD			
isciosui	e 15.4 - Segregated Delault Fund Concentration							
18.4.1	For each segregated default fund with ten or more members, but fewer than 25 members; Percentage of participant	Quarterly/	Percentage	n/a	n/a	n/a	See Explanatory Note from 18.3	
	contributions to the default fund contributed by largest five clearing members in aggregate	Quarter End				-		
18.4.2	For each segregated default fund with 25 or more members; Percentage of participant contributions to the default fund		Percentage	n/a	n/a	n/a		
	contributed by largest five clearing members in aggregate							
18.4.3	For each segregated default fund with 25 or more members; Percentage of participant contributions to the default fund		Percentage	n/a	n/a	n/a		
	contributed by largest ten clearing members in aggregate					-		
Disclosu	re 19.1 - Tiered participation arrangements, measures of concentration of client clearing							
, isciosai	c 1312 Therea participation arrangements, measures of concentration of chem dealing							
19.1.1	Number of clients (if known)	Quarterly/	Count	n/a	n/a	n/a	See Explanatory Note from 14.1	
13.1.1	Number of elicitis (if known)	Quarter End	Count	.,,	.,,,	., .	See Explanatory Note Iron 14.1	
19.1.2	Number of direct members that clear for clients		Count	n/a	n/a	64	NSCC: Number denotes members that clear for other Broker/Dealers.	
19.1.3.1	Percent of client transactions attributable to the top five clearing members (if CCP has 10+ clearing members); Peak		Percentage	n/a	n/a	n/a	See Explanatory Note from 14.1	
19.1.3.2	Percent of client transactions attributable to the top ten clearing members (if CCP has 10+ clearing members); Average		Percentage	n/a	n/a	n/a	See Explanatory Note from 14.1	
19.1.4.1	Percent of client transactions attributable to the top five clearing members (if CCP has 25+ clearing members); Peak		Percentage	n/a	n/a	n/a	See Explanatory Note from 14.1	
19.1.4.2	Percent of client transactions attributable to the top ten clearing members (if CCP has 25+ clearing members); Average		Percentage	n/a	n/a	n/a	See Explanatory Note from 14.1	
Disclosu	re 20.1 - FMI Links, Value of Trades							
20.1.1	Value of trades cleared through each link – as a share of total trade values/total notional values cleared in that service	Quarterly	USD \$MM	n/a	n/a	n/a	NSCC does not maintain any interoperable links as described by these items. CDS Clearing and	
201212	take of trades seed to all sugar each limit as a share of total trade fallow, total notional values seed to all trades	Quarterry	σσυ φιτιιιι		,	,	Depository Services, Inc. (the Canadian CSD) is a full service member of NSCC, and is subject to	
							margining and the other requirements of membership as a member. The CDS relationship is descr	
							in NSCC's Disclosure Framework under Principle 20. The GSD/CME Cross-Margining Agreement, w	
							is described in GSD's disclosure with respect to PFMI Principle 20, is not an interoperable link as described by sections 20.1 through 20.6 of the quantitative disclosure.	
							described by sections 20.1 timough 20.0 of the quantitative disclosure.	
			1	<u> </u>	1			
Disclosu	e 20.2 - FMI Links, Initial Margin or equivalent financial resources provided							
20.2.1	Initial margin or equivalent financial resources provided to each linked CCP by the CCP to cover the potential future exposure	Quarterly/	USD \$MM	n/a	n/a	n/a	See Explanatory Note from 20.1	
	of the linked CCP on contracts cleared across link	Quarter End						
D'I	20.2 FAULUIA Introduction of the Control of		•		•			
Disclosui	re 20.3 - FMI Links, Initial Margin or equivalent financial resources collected							
20.2.41	Initial margin or equivalent financial recourses collected from each linked CCD to source actuated feture account to	Quartaris/	LICD CNANA	n/~	n/-	r/-	Con Evaluation Note from 20.1	
20.3.1	Initial margin or equivalent financial resources collected from each linked CCP to cover potential future exposure to the linked CCP on contracts cleared across link (at market value and post-haircut)	Quarterly/ Quarter End	USD \$MM	n/a	n/a	n/a	See Explanatory Note from 20.1	
		Quarter Enu						

CF WII-103CO Qualititative Disclosures - DTCC								
Disclosure	Disclosure Description		Frequency	Data Type		icc	NSCC	Explanatory Notes
Reference					GSD	MBSD		
Disclosu	re 20.4 - FMI Links, Results of Back-testing coverage							
20.4.1	Number of times over the past twelve months that coverage provided by margin and equivale against each linked CCP fell below the actual marked-to-market exposure to that linked CCP – results; Intraday or Continuous or Once-a-day		Quarterly	Count	n/a	n/a	n/a	See Explanatory Note from 20.1
20.4.2	Number of observations (i.e. number of accounts multiplied by number of days covered in the Continuous or Once-a-day	e back test); Intraday or		Count	n/a	n/a	n/a	
20.4.3	Achieved coverage level; Intraday or Continuous or Once-a-day			Percentage	n/a	n/a	n/a	
Disclosu	re 20.5 - FMI Links, Additional pre-funded financial resources provided to			,				
20.5.1.1 20.5.1.2	, , , , , , , , , , , , , , , , , , , ,	· ·	Quarterly/ Quarter End	USD \$MM	n/a	n/a	n/a	See Explanatory Note from 20.1
Disclosu	re 20.6 - FMI Links, Additional pre-funded financial resources collected from							
20.6.1.1 20.6.1.2	Additional pre-funded financial resources (if any) beyond initial margin and equivalent financial linked CCP, that are available to the linked CCP to cover exposures to the CCP and whether pa from the standard default fund	·	Quarterly/ Quarter End	USD \$MM	n/a	n/a	n/a	See Explanatory Note from 20.1
Disclosu	ire 20.7 - FMI Links, Cross Margining							
20.7.1	Value of trades subject to cross margining, by clearing service, as a percentage of total trade cleared	values/total notional values	Quarterly/ Quarter End	Percentage	19%	n/a	n/a	NSCC does not maintain any cross margining arrangements. NSCC does maintain an arrangement with OCC for the settlement of exercised and assigned options, which is described in NSCC's Disclosure
20.7.2	Reduction in total initial margin held by the CCP as a result of cross margining, as a percentage would otherwise have been held.	e of total initial margin that		Percentage	0.07%	n/a	n/a	Framework under Principle 20. GSD has a cross-margining arrangement with the Chicago Mercantile Exchange. For GSD under section 20.7, disclosures are quarterly averages.
Disclosu	re 23.1 - Disclosure of rules, key procedures, and market data; Average Daily	y Volumes						
23.1.1	Average Daily Volumes by Asset Class, CCY and OTC/ETD	ОТС	Quarterly		273,615	14,203	87,066,470	For GSD/MBSD and NSCC, average daily volume data is based on sides (as opposed to trades). Omnibus Accounts are excluded for NSCC.
22.1.2		NSCC_Exchange		1100 4141	-	-	102,410,361	NSCC - OTC includes CORP/UIT BONDS, CORR CLEAR, ECN/Q.S.R., ETF CR/RD, FINRA ORF, I&RS APP, MUNI BONDS, NASDAQ TRF, O.C.C., OMGEO
23.1.2	Average Notional Value of trades cleared by Asset Class, CCY and OTC/ETD	OTC		USD \$MM	4,062,457	376,779	1,197,257	NSCC - Exchanges includes BATS, BATS BYX, C.H.X., DIRECT EDGE A, DIRECT EDGE X, IEX EXCHANGE, LTSE EXCHANGE, MEMX EXCHANGE, MIAX PEARL, NASDAQ, NASDAQ BX, NASDAQ PHLX, NYSE, NYSE 2, NYSE
		NSCC_Exchange		USD \$MM	-	-	708,040	AMEX, NYSE ARCA, NYSE NATIONAL
Disclosu	re 23.2 - Disclosure of rules, key procedures, and market data; Non-Yet-Settl	led						
23.2.1	Gross notional outstanding/total settlement value of novated but not-yet settled securities transactions by Asset Class, CCY and OTC/ETD	CDS_OTC	Quarterly/ Quarter End	USD \$MM	1,089	458	249	Sources: FICC and NSCC financial statements, as available in the DTCC public website
Disclosu	rre 23.3 - Disclosure of rules, key procedures, and market data; Execution Fac	cility						
23.3.1	Average daily volumes submitted by Execution facility or matching/confirmation venue		Quarterly		n/a	n/a	See 23.1 above	See comment from 23.1
23.3.2	Notional contract values submitted by Execution facility or matching/confirmation venue			USD \$MM	n/a	n/a	See 23.1 above	

losure	Disclosure Description	Frequency	FICC		NSCC	Furthern Notes		
ence	Disclosure Description			Data Type	GSD	MBSD	NSCC	Explanatory Notes
ymen	nt Risk Committee Disclosure 1 - Concentration Measures							
	Initial Margin Required	Top 3 Members	Quarterly/ Quarter End	USD \$MM	4,983	4,979	2,352	
	Number of Members with x% of Initial Margin Requirement	> 20%		Count	0	0	0	Aggregated by deposit account.
		15% to 20%		Count	0	1	0	
		10% to 15%		Count	1	0	0	
		5% to 10%		Count	2	4	3	
		< 5%		Count	162	87	144	
	Total Initial Margin Posted (Market Value)	Total		USD \$MM	26,957	16,060	12,507	
			Quarter End					
	Initial Margin Breakdown by Component	VaR / Volatility Coverage Component (CC)	Quarterly/ Quarter End	USD \$MM	17,880	13,340	6,810	The Value-at-Risk (VaR) and Volatility components are based on the potential price fluctuations unsettled positions. With the implementation of SVaR for FICC, Margin Proxy is now used as a backup VaR method the event of a significant vendor data disruption. The Coverage Component is a back-test-like component that is meant to address potential mo
								deficiencies. The Coverage Component is designed by NSCC to mitigate the risks associated with a Member Required Deposit being insufficient to cover projected liquidation losses to the Coverage Targe adjusting a Member's Required Deposit towards the Coverage Target.
		Margin Liquidity Deposit (MLA)		USD \$MM	121	0	356	The Margin Liquidity Adjustment Charge (MLA), addresses the risk presented to the Clearing Co a Member's portfolio contains large Net Unsettled Positions in the particular group of securities similar risk profile or in a particular asset type.
		Blackout Period Exposure Adjustment		USD \$MM	70	n/a	n/a	Blackout Period Exposure: Refers to the exposure to GSD and Reverse Repo participants of the overvaluation of MBS Collateral in GCF Repos during the Blackout Period. An adjustment to Cle Fund Requirements (increase to Repo participants and decrease to Reverse Repo participants) based on MBS positions in Member's GCF portfolios during the Blackout Period. The adjustment based on the average realized pay-down rate transactions. The adjustment is made during the Period, the first 5 to 7 business days each month.
		CME Cross Margin		USD \$MM	-13	n/a	n/a	GSD has a cross-margining arrangement with the Chicago Mercantile Exchange. The amount re the aggregate margin savings for common members who elect to participate in the cross-marg arrangement.
		Margin Req. Differential (MRD)		USD \$MM	n/a	n/a	2,003	The NSCC MRD is designed to address position-variability risk by estimating the shortfall of end VaR and mark-to-market compared with the next day's intraday risk and the risk that the next

ure	Disclosure Description		Frequency	Data Type	ا	FICC	NSCC	Explanatory Notes
ence			rrequericy	Бата Туре	GSD	MBSD	14300	Explanatory Notes
ment	Risk Committee Disclosure 2 - Initial Margin Detail - Co	ont'd						
lr	Initial Margin Breakdown by Component (cont'd)	Mark-to-Market (MtM)	Quarterly/ Quarter End	USD \$MM	n/a	0	351	As a cash market CCP, NSCC uses a continuous net system where securities within the settlement system are marked daily to the prior night's closing price. Net portfolio debits per Member are collected as part of the Member's Required Deposit; net portfolio credits are not included. Value a includes 'When Issues MtM'. In FICC, GSD maintains a pass-through MtM process whereby it collects MTM debits from those Members with debits and passes those to the Members with MTM credits. For MBSD, there is a Deterministic Risk Component ("DRC") in the Clearing Fund Requirement that reflects mark-to-mar results on outstanding positions, regardless of settlement date, cash items and adjustments that a the result of netting, and principal and interest exposure on failed positions. At least once daily, M calculates the DRC that reflects the mark-to-market of the portfolio to account for the difference between the contract price and current market prices, interest and other cash settlement obligation DRC can be a credit or debit amount. If the DRC is a debit, this amount will increase the Clearing For requirement. If the DRC is a credit, it can be used to reduce the amount of the Required Fund requirement (subject to the VaR Floor).
		Special Charge		USD \$MM	317	407	239	GSD includes: Back Test Charges, GCF Early Unwind Intraday Charge, Intraday Supp. Fund Deposit, Minimum Deposit, and Adequate Assurance MBSD includes: Back Test Charges, Intraday Charges, and Adequate Assurance NSCC includes: Back Test Charges, Adequate Assurance, and Intraday Mark-to-Market
		Other Charges		USD \$MM	537	3	1,697	GSD includes: Minimum Requirement Adjustments, Excess Capital Premium, and Falling Below Minimum Requirement MBSD includes: Principal & Interest Related Charges, Cash Obligation Items, Excess Capital Premiu Falling Below Minimum Requirement, Applied Confidence Amount, and Minimum Requirement Adjustments NSCC includes: Family Issued Securities, CNS Fails, Non-CNS Requirements, FundSERV, CF Premiur Minimum Requirement Adjustments