



Q2 2019

## FIXED INCOME CLEARING CORPORATION

AND

## NATIONAL SECURITIES CLEARING CORPORATION

QUANTITATIVE DISCLOSURES FOR CENTRAL COUNTERPARTIES

Revised October 1, 2019 (Disclosure 7.1.2)

## **TABLE OF CONTENTS**

PRINCIPLE #	DISCLOSURE #	DISCLOSURE TITLE
4	4.1	Total value of default resources (excluding initial and retained variation margin), split by clearing service if default funds are segregated by clearing service)
	4.2	Ксср
	4.3	Value of pre-funded default resources (excluding initial and retained variation margin) held for each clearing service, in total and split by
	4.4	Credit Risk Disclosures
5	5.1	Assets eligible as initial margin, and the respective haircuts applied
	5.2	Assets Eligible for pre-funded participant contributions to the default resources, and the respective haircuts applied (if different from 5.1)
	5.3	Results of testing of haircuts
6	6.1	For each clearing service, total initial margin required, split by house and client (or combined total if not segregated)
	6.2	For each clearing service, total initial margin held, split by house and client
	6.3	Initial Margin rates on individual contracts, where the CCP sets such rates
	6.4	Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing service and the key model design parameters for each initial margin model applied to that clearing service
	6.5	Results of back-testing of initial margin. At a minimum, this should include, for each clearing service and each initial margin model applied to that clearing service
	6.6	Average Total Variation Margin Paid to the CCP by participants each business
	6.7	Maximum total variation margin paid to the CCP on any given business day over the period
	6.8	Maximum aggregate initial margin call on any given business day over the period
7	7.1	Liquidity Risk
	7.2	Size and composition of any supplementary liquidity risk resources for each clearing service above those qualifying liquid resources above.
	7.3	Liquidity Risk

PRINCIPLE #	DISCLOSURE #	DISCLOSURE TITLE
12	12.1	Percentage of settlements by value effected using a DvP, DvD or PvP settlement mechanism
	12.2	Percentage of settlements by volume effected using a DvP, DvD or PvP settlement mechanism
13	13.1	Quantitative information related to defaults
14	14.1	Total Client Positions held as a share of notional values cleared or of the settlement value of securities transactions
15	15.1	General business risk
	15.2	General business risk; Financial Disclosures
	15.3	General business risk; Income breakdown
16	16.1	Total cash (but not securities) received from participants, regardless of the form in which it is held, deposited or invested, split by whether it was received as initial margin or default fund contribution
	16.2	How total cash received from participants (16.1) is held/deposited/invested, including;
	16.3	Rehypothecation of participant assets (ie non-cash)
17	17.1	Operational availability target for the core system(s) involved in clearing (whether or not outsourced) over specified period for the system (e.g. 99.99% over a twelve-month period)
	17.2	Actual availability of the core system(s) over the previous twelve month period
	17.3	Total number of failures
	17.4	Recovery time objective(s)
18	18.1	Number of clearing members, by clearing service
	18.2	Open Position Concentration
	18.3	Initial Margin Concentration
	18.4	Segregated Default Fund Concentration
19	19.1	Tiered participation arrangements, measures of concentration of client clearing

PRINCIPLE #	DISCLOSURE #	DISCLOSURE TITLE
20	20.1	FMI Links, Value of Trades
	20.2	FMI Links, Initial Margin or equivalent financial resources provided
	20.3	FMI Links, Initial Margin or equivalent financial resources collected
	20.4	FMI Links, Results of Back-testing coverage
	20.5	FMI Links, Additional pre-funded financial resources provided to
	20.6	FMI Links, Additional pre-funded financial resources collected from
	20.7	FMI Links, Cross Margining
23	23.1	Disclosure of rules, key procedures, and market data; Average Daily Volumes
	23.2	Disclosure of rules, key procedures, and market data; Non-Yet-Settled
	23.3	Disclosure of rules, key procedures, and market data; Execution Facility
PRC	PRC 1	Payment Risk Committee Disclosure - Concentration Measures
	PRC 2	Payment Risk Committee Disclosure - Initial Margin Detail

## **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

Disclosure					F	ICC		
Reference	Disclosure Description		Frequency	Data Type	GSD	MBSD	NSCC	Explanatory Notes
Disclosu	e 4.1 - Total value of default resources (excluding initial and retained variate	ation margin), split by cleari	ng service if defau	ılt funds are segi	egated by cleari	ng service		
	, J	5 % 1 7		, and the second	,			
4.1.1	Prefunded - Own Capital Before		Quarterly/	USD \$MM	5	4.9	79.6	The Company maintains an amount referred to as the corporate contribution, to be applied to losses of
			Quarter End					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.
443	Particular Com Carital After			LICD CAAAA	(	-/-	- /-	
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	15,495	3,272	6,489	NSCC and each FICC Division calculates and collects Clearing Fund from its Members using a risk-based
					25,155	7,2.2	3,155	margin methodology. These amounts (a Member's "Required Fund Deposit") operate as the Member's
4.1.5	Prefunded - Aggregate Participant Contributions - Post-Haircut Posted			USD \$MM	20,442	4,283	7,275	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 rou	nd of participant defaults)		USD \$MM	n/a	n/a	n/a	
4.1.8	Committed - Aggregate participant commitments to address an initial participant default (o	r initial round of participant		USD \$MM	n/a	n/a	n/a	
4.1.0	defaults)	i illitiai rouliu oi participalit		υσυ φίνινι	11/4	11/4	ny u	
4.1.9	Committed - Aggregate participant commitments to replenish the default fund to deal with	a subsequent participant default		USD \$MM	n/a	n/a	n/a	
	(or round of participant defaults) after the initial participant default (or round of participan	defaults) has been addressed						
4.1.10	Committed - Other			USD \$MM	n/a	n/a	n/a	
Disclosu	re 4.2 - Kccp - Quarter End							
	- 1- 110p							
4.2.1	Kccp - Kccp need only be reported by those CCPs which are, or seek to be a "qualifying CCP'	under relevant law.	Quarterly	USD \$MM	589	n/a	n/a	
	, , , , , , , , , , , , , , , , , , ,		,					
<u> </u>								
Disclosu	e 4.3 - Value of pre-funded default resources (excluding initial and retained	ed variation margin) held for	each clearing ser	vice				
4.3.1	Cash deposited at a central bank of issue of the currency concerned	Pre Haircut	Quarterly/	USD \$MM	3,850	900	4,031	
		Post Haircut		USD \$MM	3,850	900	4,031	
4.3.2	Cash deposited at other central banks	Pre Haircut		USD \$MM	0	0	0	
		Post Haircut		USD \$MM	0	0	0	
4.3.3	Secured cash deposited at commercial banks (including reverse repo)	Pre Haircut		USD \$MM	350	100	375	
		Post Haircut		USD \$MM	357	102	383	
4.3.4	Unsecured cash deposited at commercial banks	Pre Haircut		USD \$MM	720	346	821	See Explanatory Note from 4.1
		Post Haircut		USD \$MM	720	346	821	

								710 01 June 30, 2013
Disclosure	Disclosure Description		Frequency	Data Type		icc	NSCC	Explanatory Notes
Reference			. requency	Jana Type	GSD	MBSD		,
Disclosu	re 4.3 - Value of pre-funded default resources (excluding initial an	d retained variation margin) held for	r each clearing ser	vice - Cont'd				
4.3.4.2	Unsecured cash invested in Money Market Mutual Funds	Pre Haircut	Quarterly/	USD \$MM	1,103	117	1,564	See Explanatory Note from 4.1
4.3.4	Unsecured cash deposited at commercial banks;	Post Haircut	Quarter End	USD \$MM	1,103	117	1,564	
4.3.4.3	Unsecured cash invested in US Treasury Bills	Pre Haircut		USD \$MM	0	0	0	See Explanatory Note from 4.1
4.3.4	Unsecured cash deposited at commercial banks;	Post Haircut		USD \$MM	0	0	0	
4.3.5	Non-Cash Sovereign Government Bonds - Domestic	Pre Haircut		USD \$MM	11,597	2,526	519	See Explanatory Note from 4.1
		Post Haircut		USD \$MM	11,242	2,441	501	
4.3.6	Non-Cash Sovereign Government Bonds - Other	Pre Haircut		USD \$MM	0	0	0	
		Post Haircut		USD \$MM	0	0	0	
4.3.7	Non-Cash Agency Bonds	Pre Haircut		USD \$MM	3,415	708	0	See Explanatory Note from 4.1
		Post Haircut		USD \$MM	3,176	380	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	

Disclosu	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	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 transactions cleared for indirect participants) in extreme but plausible market conditions.  (Previous 12 Months)	Peak Day/ Previous 12 Months		USD \$MM	773	1,036	1,881	Amounts correspond to largest Cover 1 ratio
		Mean Avg/ Previous 12 Months		USD \$MM	482	885	411	
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	10	6	116	Amount represents Peak/Average VaR model back test results.
	participants) (Previous 12 Months)	Avg/ Previous 12 Months		USD \$MM	7	2	5	

a: 1						ICC .		
Disclosure Reference	Disclosure Description		Frequency	Data Type	GSD	MBSD	NSCC	Explanatory Notes
	re 4.4 - Credit Risk Disclosures - Cont'd				G3D	MIDSD		
Disciosai	C 414 Create historissures contra							
4.4.7	For each clearing service, the estimated largest aggregate stress loss (in excess of initial	Peak Day/	Quarterly	USD \$MM	1,297	2,478	4,049	Amounts correspond to largest Cover 2 ratio
	margin) that would be caused by the default of any two participants and their affiliates (including transactions cleared for indirect participants) in extreme but plausible market	Previous 12 Months		1100 0111				_
	conditions (Previous 12 Months)	Mean Avg/ Previous 12 Months		USD \$MM	786	1,454	635	
4.4.8	Number of business days, if any, on which the above amount (4.4.7) exceeded			Bus. Days	0	0	0	
110	actual pre-funded default resources (in excess of initial margin) and by how			1100 0111				
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		USD \$MM	0	0	0	
4.4.10	For each clearing service, what was the actual largest aggregate credit exposure (in excess of	Peak Day/		USD \$MM	11	11	191	Amount represents Peak/Average VaR model back test results.
	initial margin) to any two participants and their affiliates (including transactions cleared for indirect participants)? (Previous 12 Months)	Previous 12 Months Avg/		USD \$MM	8	4	8	
	multeet participants): (Frevious 12 Months)	Previous 12 Months		OJD ŞIVIIVI		7	Ů	
Disclosur	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	Website/			http://www.dtcc	
			are made	Hyperlink			.com/~/media/Fi	
							e es/Downloads/le gal/rules/nscc_ru	
					v_rules.pdf	sd_rules.pdf	les.pdf	
					Section:	Section:	Section:	
					"SCHEDULE OF HAIRCUTS FOR	"SCHEDULE OF HAIRCUTS FOR	"PROCEDURE XV", "III.	
					ELIGIBLE	ELIGIBLE	Collateral Value	
					CLEARING FUND		of Eligible	
					SECURITIES"	SECURITIES"	Clearing Fund	
							Securities"	
D'a da suu	F. 2. A seat of File that for one founded and the state of the state of foundations and the state of foundations and the state of foundations are stated as a state of foundations and the state of foundations are stated as a state of foundation and the state of foundations are stated as a state of foundation and the state of foundations are stated as a state of foundation are stated as a stated as a state of foundation are stated as a stated as a state of foundation are stated as a sta			!! /:£ -!:££	. f F 4\			
Disclosur	re 5.2 - Assets Eligible for pre-funded participant contributions to the default r	esources, and the resp	ective naircuts appi	iea (it aitteren	t from 5.1)			
5.2.1	Assets Eligible for pre-funded participant contributions to the default resources, and the respect	ive haircuts applied (if	Update as changes		See 5.1 above	See 5.1 above	See 5.1 above	
	different from 5.1)	, , , , , , , , , , , , , , , , , , , ,	are made					
Disclosur	as E.2. Doculto of tooting of howards			·				
Disclosur	re 5.3 - Results of testing of haircuts							
5.3.1	Confidence interval targeted through the calculation of haircuts		Quarterly	Percentage	99%	99%	99%	
			,	Ŭ*				
5.3.2	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 +	The lookback period, "10 years +", starts Jan 1, 2008 and continues to the last day of this quarter tested &
								reported herewith. Based on current stress testing retention process all Historic Scenario Dates
5.3.4	Number of days during the look back period on which the fall in value during the assumed	Troocury		Bus Dave	11	11	11	previously derived that are on, or after Jan 1, 2008 are retained.
5.3.4	Number of days during the look-back period on which the fall in value during the assumed holding/liquidation period exceeded the haircut on an asset.	Treasury Agency		Bus. Days Bus. Days	0	0	0	See hyperlinks under 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), 1 day for 20 yrs.
		Mortgages		Bus. Days	0	0	0	and 11 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 11 (as 1 day caused a breach for both tenors, 20 & 30 yrs.). For Agencies and Mortgages no breaches were observed under current HCs.

Disclosure	Plada was Paradatha		<b>-</b>	Data Tura	F	icc	NICCO	Furthern Natura
Reference	Disclosure Description		Frequency	Data Type	GSD	MBSD	NSCC	Explanatory Notes
Disclosu	re 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	15,495	3,272	6,489	See Explanatory Note from 4.1.4
0.1.1	oca mitar margin equired spine by neader direct group, shell nect and total (in not see, equired)	Client (Gross)	quarterry	USD \$MM	n/a1	n/a1	n/a1	See Expenses y roce from him
		Client (Net)		USD \$MM	n/a1	n/a1	n/a1	<sup>1</sup> Not applicable. GSD/MBSD/NSCC does not hold client margin. See NSCC/FICC's Disclosure
		Total		USD \$MM	15,495	3,272	6,489	Frameworks, Principle 14 discussion.
Disclosu	re 6.2 - For each clearing service, total initial margin required, split by house an	nd client (or combined to	otal if not segrega	ted)				Not applicable. GSD/MBSD/NSCC does not hold client margin. See NSCC/FICC's Disclosure
6.2.1		I		1100 4044	- /-	- 1-	- 4-	Frameworks, Principle 14 discussion. For aggregate numbers, see 6.1.1 above.
6.2.1	Cash deposited at a central bank of issue of the currency concerned	House IM Pre Haircut	Quarterly	USD \$MM USD \$MM	n/a n/a	n/a n/a	n/a n/a	
		House IM Post Haircut  Client IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		Client IM Post Haircut		USD \$MM	n/a	n/a	n/a	
		Total IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		Total IM Post Haircut		USD \$MM	n/a	n/a	n/a	
6.2.2	Cash deposited at other central banks	House IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
5.2.2		House IM Post Haircut		USD \$MM	n/a	n/a	n/a	
		Client IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		Client IM Post Haircut		USD \$MM	n/a	n/a	n/a	
		Total IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		Total IM Post Haircut		USD \$MM	n/a	n/a	n/a	
6.2.3	Secured cash deposited at commercial banks (including reverse repo)	House IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		House IM Post Haircut		USD \$MM	n/a	n/a	n/a	
		Client IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		Client IM Post Haircut		USD \$MM	n/a	n/a	n/a	
		Total IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		Total IM Post Haircut		USD \$MM	n/a	n/a	n/a	
6.2.4	Unsecured cash deposited at commercial banks	House IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		House IM Post Haircut		USD \$MM	n/a	n/a	n/a	
		Client IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		Client IM Post Haircut		USD \$MM	n/a	n/a	n/a	
		Total IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		Total IM Post Haircut		USD \$MM	n/a	n/a	n/a	
6.2.5	Non-Cash Sovereign Government Bonds - Domestic	House IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		House IM Post Haircut		USD \$MM	n/a	n/a	n/a	
		Client IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		Client IM Post Haircut		USD \$MM	n/a	n/a	n/a	
		Total IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
636	Non Cach Coversign Coversment Bonds Other	Total IM Post Haircut		USD \$MM	n/a	n/a n/a	n/a n/a	
6.2.6	Non-Cash Sovereign Government Bonds - Other	House IM Pre Haircut		USD \$MM USD \$MM	n/a			
		House IM Post Haircut  Client IM Pre Haircut		USD \$MM	n/a n/a	n/a n/a	n/a n/a	
		Client IM Post Haircut		USD \$MM	n/a	n/a	n/a	
		Total IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		Total IM Post Haircut		USD \$MM	n/a	n/a	n/a	
		- Star livi i Ost Hall Cut		ואוואול חכם	, u	, u	, u	

Disclosure			_		F	ICC		
Reference	Disclosure Description		Frequency	Data Type	GSD	MBSD	NSCC	Explanatory Notes
Disclosu	re 6.2 - For each clearing service, total initial margin required, split by house a	nd client (or combined t	otal if not segrega	ted) (cont'd)				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.
6.2.7	Non-Cash Agency Bonds	House IM Pre Haircut	Quarterly	USD \$MM	n/a	n/a	n/a	
		House IM Post Haircut		USD \$MM	n/a	n/a	n/a	
		Client IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		Client IM Post Haircut		USD \$MM	n/a	n/a	n/a	
		Total IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		Total IM Post Haircut		USD \$MM	n/a	n/a	n/a	
6.2.8	Non-Cash State/municipal bonds	House IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		House IM Post Haircut		USD \$MM	n/a	n/a	n/a	
		Client IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		Client IM Post Haircut		USD \$MM	n/a	n/a	n/a	
		Total IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		Total IM Post Haircut		USD \$MM	n/a	n/a	n/a	
6.2.9	Non-Cash Corporate bonds	House IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		House IM Post Haircut		USD \$MM	n/a	n/a	n/a	
		Client IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		Client IM Post Haircut		USD \$MM	n/a	n/a	n/a	
		Total IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		Total IM Post Haircut		USD \$MM	n/a	n/a	n/a	
6.2.10	Non-Cash Equities	House IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		House IM Post Haircut		USD \$MM	n/a	n/a	n/a	
		Client IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		Client IM Post Haircut		USD \$MM	n/a	n/a	n/a	
		Total IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		Total IM Post Haircut		USD \$MM	n/a	n/a	n/a	
6.2.11	Non-Cash Commodities - Gold	House IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		House IM Post Haircut		USD \$MM	n/a	n/a	n/a	
		Client IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		Client IM Post Haircut		USD \$MM	n/a	n/a	n/a	
		Total IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		Total IM Post Haircut		USD \$MM	n/a	n/a	n/a	
6.2.12	Non-Cash Commodities - Other	House IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		House IM Post Haircut		USD \$MM	n/a	n/a	n/a	
		Client IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		Client IM Post Haircut		USD \$MM	n/a	n/a	n/a	
		Total IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		Total IM Post Haircut		USD \$MM	n/a	n/a	n/a	
6.2.13	Non-Cash - Mutual Funds / UCITs	House IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		House IM Post Haircut	1	USD \$MM	n/a	n/a	n/a	
		Client IM Pre Haircut	1	USD \$MM	n/a	n/a	n/a	
		Client IM Post Haircut	1	USD \$MM	n/a	n/a	n/a	
		Total IM Pre Haircut	1	USD \$MM	n/a	n/a	n/a	
		Total IM Post Haircut	1	USD \$MM	n/a	n/a	n/a	
		1	L	· · • • · · · · · · · · · · · · · · · ·				1

Disclosure						ICC		
Reference	Disclosure Description		Frequency	Data Type	GSD	MBSD	NSCC	Explanatory Notes
Disclosu	re 6.2 - For each clearing service, total initial margin required, split by house a	nd client (or combined t	total if not segregat	ed) (cont'd)				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.
6.2.14	Non-Cash - Other	House IM Pre Haircut	Quarterly	USD \$MM	n/a	n/a	n/a	
		House IM Post Haircut		USD \$MM	n/a	n/a	n/a	
		Client IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		Client IM Post Haircut		USD \$MM	n/a	n/a	n/a	
		Total IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		Total IM Post Haircut		USD \$MM	n/a	n/a	n/a	
6.2.15	Cash deposited at a central bank of issue of the currency concerned; Total (if not segregated)	House IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		House IM Post Haircut		USD \$MM	n/a	n/a	n/a	
		Client IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		Client IM Post Haircut		USD \$MM	n/a	n/a	n/a	
		Total IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
		Total IM Post Haircut		USD \$MM	n/a	n/a	n/a	
	re 6.3 - Initial Margin rates on individual contracts, where the CCP sets such ra	tes			- t-	n fo	1	
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	
	design parameters for each initial margin model applied to that clearing service		are made		Simulation + Haircut	Simulation + Haircut	VaR + Haircut	
Disclosu	re 6.5 - Results of back-testing of initial margin. At a minimum, this should incl	ude, for each clearing s	ervice and each init	tial margin mod	el applied to tha	t 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	127	43	71	
	fell below the actual marked-to-market exposure of that member account – based on daily back-testing results	Previous 12 Months	,					
6.5.2	Number of observations ([Number of accounts * number of days])	Previous 12 Months		Count	27,245	16,445	30,798	Starting in 2Q2019, MBSD data excludes Members with no positions
6.5.3	Achieved coverage level [aggregate CCP-level backtest coverage]	Previous 12 Months		Percentage	99.5%	99.7%	99.8%	
6.5.4	Where breaches of initial margin coverage (as defined in 6.5(a)) have occurred, report on size of uncovered exposure	Peak Size/ Previous 12 Months		USD \$MM	96	10	84	
6.5.5	Where breaches of initial margin coverage (as defined in 6.5(a)) have occurred, report on size of uncovered exposure	Average Size/ Previous 12 Months		USD \$MM	5	1	6	
Disclosu	re 6.6 - Average Total Variation Margin Paid to the CCP by participants each bu	usiness						
		Average	Quarterly	USD \$MM	2,652	866	400	For GSD, VM is a cash pass-through process across the members; for MBSD and NSCC, VM charges are
6.6.1	Average Total Variation Margin Paid to the CCP by participants each business day	Average	Quarterly	וייוויול סכט	2,032	800		included as part of the Clearing Fund requirements.

CPIVII-I	OSCO Quantitative disclosures - DTCC							AS OF June 30, 2019				
Disclosure	Disclosure Description			Data Type	F	icc	NSCC	Explanatory Notes				
Reference	Disclosure Description		Frequency	Data Type	GSD	MBSD	NSCC	Explanatory Notes				
Disclosu	re 6.7 - Maximum total variation margin paid to the CCP on any given business	day 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	6,097	2,181	1,352	See Explanatory Note from 6.6				
Disclosu	Disclosure 6.8 - Maximum aggregate initial margin call on any given business day over the period											
6.8.1	Maximum aggregate initial margin call on any given business day over the period	Maximum	Quarterly	USD \$MM	2,497	759	2,360	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	rre 7.1 - Liquidity Risk											
NSCC res	sult for Disclosure# 7.1.2 has been revised since original publication											
7.1.1	State whether the clearing service maintains sufficient liquid resources to 'Cover 1' or 'Cover 2'.		Quarterly/		Cover 1	Cover 1	Cover 1					
7.1.2	Size and composition of qualifying liquid resources for each clearing service; (a) Cash deposited	at a central bank of issue of	Quarter End	USD \$MM	3.850	900	10,060					
	the currency concerned				3,333							
7.1.3	Size and composition of qualifying liquid resources for each clearing service; (b) Cash deposited	at other central banks		USD \$MM	n/a	n/a	n/a					
7.1.4	1 , 5 ,	Repo Only		USD \$MM	350	100	375					
	deposited at commercial banks (including reverse repo)											
7.1.5	Size and composition of qualifying liquid resources for each clearing service; (d) Unsecured cash deposited at commercial banks	Commerical Bank Deposits		USD \$MM	720	346	2,021					
	casii deposited at confinercial banks	Manage Mandark Sunda		1100 0000	1 102	447	4 504					
		Money Market Funds		USD \$MM	1,103	117	1,564					
		US Treasury Bills		USD \$MM	n/a	n/a	n/a					
7.1.6	Size and composition of qualifying liquid resources for each clearing service; (e) secured commit for which collateral/security will be provided by the CCP if drawn) including committed foreign of the CCP is drawn.			USD \$MM	105,100	52,155	11,216	For FICC, amount represents a rules-based facility, Capped Contingency Liquidity Facility ("CCLF"). For NSCC, the amount represents a secured line of credit with a syndicate of lenders excluding the largest				
	committed repos	, , , , , , , , , , , , , , , , , , ,						contributor to the line of credit.				
7.1.7	7.1.7 Size and composition of qualifying liquid resources for each clearing service; (f) unsecured committed lines of credit (ie which			USD \$MM	n/a	n/a	n/a					
	the CCP may draw without providing collateral/security)											
7.1.8	1 , 5 ,			USD \$MM	15,012	2,934	519	Amounts include Clearing Fund securities.				
	and investments that are readily available and convertible into cash with prearranged and highle arrangements even in extreme but plausible market conditions	reliable funding										
	anangements even in extreme but plausible market containons											

Disabassas					FICC		
Disclosure Reference	Disclosure Description	Frequency	Data Type	GSD	MBSD	NSCC	Explanatory Notes
Disclosu	re 7.1 - Liquidity Risk - Cont'd						
7.1.9	Size and composition of qualifying liquid resources for each clearing service; (h) other		USD \$MM	50,328	682	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. 6/28 was not an MBSD class-settlement day. For GSD/MBSD, amount represents the Repo Value of Underlying Securities.  NSCC's Supplemental Liquidity Deposit ("SLD") program provides for additional rules-based liquidity resources around monthly option expiry periods. Option expiry settlement cycles typically present elevated liquidity needs to NSCC. Members may be required to provide additional funding based on historical activity, or may voluntarily pre-fund outsize liquidity needs. Sizing of supplemental liquidity resources will vary based on the historical activity presented by NSCC's largest members as well as market dynamics during the current settlement cycle. (As of 6/28 there were no SLD deposits on hand)  Resources reported in Section 7.1 are as of 6/28/19 and do not correspond to the dates of the actual largest obligations. On the dates of the actual largest obligations sufficient liquidity resources were available.
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, and any applicable rule, policy, procedure, and governance arrangement around such decision making.			n/a	n/a	n/a	
Disclosu	re 7.2 - Size and composition of any supplementary liquidity risk resources for each clearing service ab	ove those qualifyi	ng liquid resou	rces 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 lo: from clearing ba as additional liquidity resourc	nks from clearing banks as additional	loans/equity repo utilizing the cash	
Disclosu	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	73,005	43,596	21,621	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	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	0	
7.3.3	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	74,782	43,596	22,874	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.  GSD/MBSD/NSCC values are liquidity obligations based on CALM offsets.
7.3.4	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	73,005	43,596	21,621	See Explanatory Note from 7.3.1

	Poses Quantitative Disclosures Direc						<u>A3 01 Julie 30, 2013</u>	
Disclosure	Disclosure Description	Frequency	Data Type		ICC	NSCC	Explanatory Notes	
Reference				GSD	MBSD			
Disclosu	ıre 7.3 - Liquidity Risk - Cont'd							
7.3.5	Number of business days, if any, on which the above amounts exceeded its qualifying liquid resources in each relevant	Quarterly	Bus. Days	0	0	0	See Explanatory Note from 7.1.9 reference for SLD	
	currency (as identified in 7.1 and available at the point the breach occurred), and by how much		USD \$MM	0	0	0		
Disclosu	ire 12.1 - Percentage of settlements by value effected using a DvP, DvD or PvP settlement mechanism							
12.1.1	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.	
12.1.2	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	
							mechanism.	
12.1.3	Percentage of settlements by value effected using a PvP settlement mechanism		Percentage	n/a	n/a	n/a		
1								
Disclosu	ire 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	
							mechanism.	
12.2.3	Percentage of settlements by volume effected using a PvP settlement mechanism		Percentage	n/a	n/a	n/a		
Disclosu	ure 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		
40.40				,	,	,		
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		
13.1.4	Qualititative information related to defaults, Appropriate references to other published material related to the defaults			1,70	174	11/4		
Disclosu	ire 14.1 - Total Client Positions held as a share of notional values cleared or of the settlement value of	securities transact	ions					
14.1.1	Total Client Positions held in individually segregated accounts	Quarterly/ Quarter End		n/a	n/a	n/a	Not applicable for the US cash markets. See NSCC and FICC 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		Percentage	100%	100%	100%	1	

							-10 0. Jane 00, 10 15
Disclosure Reference	Disclosure Description	Frequency	Data Type	GSD F	ICC MBSD	NSCC	Explanatory Notes
	re 15.1 - General business risk	_		435	Middle		Values representative of the 2018 Annual Audited Financial Statements. Values will remain static until publication of the 2019 Annual Audited Financial Statements (Q4 2019).
15.1.1	Value of liquid net assets funded by equity	Annual	USD \$MM	266		446	
15.1.2	Six months of current operating expenses		USD \$MM	108		153	
Disclosu	re 15.2 - General business risk; Financial Disclosures						Values representative of the 2018 Annual Audited Financial Statements. Values will remain static until publication of the 2019 Annual Audited Financial Statements (Q4 2019).
15.2.1	Total Revenue	Annual	USD \$MM	2	263	453	
15.2.2	Total Expenditure		USD \$MM	2	224	322	
15.2.3	Profits		USD \$MM	:	39	131	
15.2.4	Total Assets		USD \$MM	26	,835	16,360	
15.2.5	Total Liabilities		USD \$MM	26	,547	15,802	
15.2.6	Explain if collateral posted by clearing participants is held on or off the CCP's balance sheet			Collateral is held on Balance Sheet		Collateral is held on Balance Sheet	
15.2.7	Additional items as necessary		USD \$MM	n/a		n/a	
Disclosu	re 15.3 - General business risk; Income breakdown					1	Values representative of the 2018 Annual Audited Financial Statements. Values will remain static until publication of the 2019 Annual Audited Financial Statements (Q4 2019).
15.3.1	Percentage of total income that comes from fees related to provision of clearing services	Annual	Percentage	10	00%	100%	
15.3.2	Percentage of total income that comes from the reinvestment (or rehypothecation) of assets provided by clearing participants		Percentage	n	n/a	n/a	
Disclosu	re 16.1 - Total cash (but not securities) received from participants, regardless of the form in which it is l	held, deposited o	r invested, split	by whether it wa	s received as init	ial margin or defa	nult fund contribution
46.4.1	Total only (but and a second of the second o	Out that I	LICE CAMA	6 022	4.462	5 700	Car Fundamental Nata Court Ad
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	6,023	1,463	6,790	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	Qualitati End	Percentage	64%	62%	59%	
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	6%	7%	6%	

Disclosure	Disclosure Description	Frequency	Data Type	F	ICC	NSCC	Explanatory Notes
Reference			Data Type	GSD	MBSD	NSCC	ехріанасогу мосез
Disclosu	re 16.2 - How total cash received from participants (16.1) is held/deposited/invested, including; - Cont	'd					
16.2.5	Percentage of total participant cash held as cash deposits (including through reverse repo); as cash deposits at commercial banks (Unsecured)	Quarterly/ Quarter End	Percentage	12%	24%	12%	
16.2.6	Percentage of total participant cash held as cash deposits (including through reverse repo); in money market funds		Percentage	18%	8%	23%	
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%	USD
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%	0%	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%	0%	0%	USD
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	State if the CCP investment policy sets a limit on the proportion of the investment portfolio that may be allocated to a single counterparty, and the size of that limit.			Yes	Yes	Yes	Size of limits will vary depending on credit rating and other factors.
16.2.19	State the number of times over the previous quarter in which this limit has been exceeded.		Count	0	0	0	

Disclosure					F	ICC		
Reference	Disclosure Description		Frequency	Data Type	GSD	MBSD	NSCC	Explanatory Notes
Disclosu	re 16.3 - Rehypothecation of participant assets (ie non-cash)					555		
21001000	The state of the s							
16.3.1	Total value of participant non-cash rehypothecated (Initial margin)		Quarterly/	USD \$MM	0	0	0	Rehypothecation used for liquidity purposes only in the event of a default.
			Quarter End					
16.3.2	Total value of participant non-cash rehypothecated (Default fund)			USD \$MM	0	0	0	
16.3.3	Rehypothecation of participant assets (ie non-cash) by the CCP where allowed; initial margin;	ON 1D		USD \$MM	0	0	0	
	over the following 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	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	
Disclosu	re 17.1 - Operational availability target for the core system(s) involved in clear	ring (whether or not out	sourced) over spe	cified period for	tne system			
47.4.4	Countries I will be the second for the countries (A) in which is a local and the second secon	d)	Overstank	I Barrantana	00.5%	00.5%	00.5%	I
17.1.1	Operational availability target for the core system(s) involved in clearing (whether or not outsout for the system	ircea) over specified period	Quarterly	Percentage	99.6%	99.6%	99.6%	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
								the applicable SLA.
			•	•	•	1	1	
Disclosu	re 17.2 - Actual availability of the core system(s) over the previous twelve mor	nth period						
			1 .	_	1			
17.2.1	Actual availability of the core system(s) over the previous twelve month period		Quarterly	Percentage		99.96%		Availability is calculated across multiple systems. Specifically, CMU, CNS, Risk Management, GSD, MBSD and Trade Capture. Since Risk Management is across FICC and NSCC, actual availability cannot be
								captured at the individual entity level. Actual availability is across all three in total.
Disclosu	re 17.3 - Total number of failures							
17.3.1	, , ,	previous twelve month	Quarterly	Count /		5 / 31:03:00		Total number of failures and duration are for Reg SCI reportable failure incidents impacting the CCP
	period (Duration of Failure)			hh:mm:ss				systems. Incidents that do not result in a direct business impact are not included. One incident accounted for 26 hours and 15 minutes, but only impacted a small subset of accounts.
								accounted for 20 flours and 13 finitutes, but only impacted a small subset of accounts.
								1
Disclosu	re 17.4 - Recovery time objective(s)							
17.4.1	Recovery time objective(s) (e.g. within two hours)		Quarterly	Time	Within 2 Hours	Within 2 Hours	Within 2 Hours	Recovery time objective is within 2 hours.

Reference	Disclosure Description		Frequency	Data Type	F	сс	NSCC	Explanatory Notes
			Total Satury Data Type		GSD	MBSD	Nace	
Disclosu	re 18.1 - Number of clearing members, by clearing service							For GSD, there are Broker/Dealers, Government Sponsored Entities, Banks 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	abers		Count	128	79	63	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	87	
18.1.1.3	Number of others category (Describe in comments)	nments)		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	41	16	13	
18.1.2.4	Number of other participants (Describe in comments)			Count	87	63	137	Includes Broker/dealers, Stock Exchanges, CSD's and Trust members. Excludes Banks.
18.1.3.1	Number of domestic participants			Count	96	77	147	
18.1.3.1	Number of foreign participants			Count	32	2	3	US Branches/Agencies of Non US legal entities will be considered Non-US (foreign)
Disalosu	40.2 On an Barthian Consentration		•	•		•		
Disclosu	re 18.2 - Open Position Concentration							
18.2.1	For each clearing service with ten or more members, but fewer than 25 members; Percentage	Average End of Day	Quarterly	Percentage	n/a	n/a	n/a	
		Average End of Day Peak End of Day	Quarterly	Percentage Percentage	n/a n/a	n/a n/a	n/a n/a	
	For each clearing service with ten or more members, but fewer than 25 members; Percentage of open positions held by the 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		Quarterly	-			-	
18.2.1	For each clearing service with ten or more members, but fewer than 25 members; Percentage of open positions held by the largest five clearing members, including both house and client, in aggregate	Peak End of Day	Quarterly	Percentage	n/a	n/a	n/a	
18.2.1	For each clearing service with ten or more members, but fewer than 25 members; Percentage of open positions held by the 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 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	Quarterly	Percentage Percentage	n/a 22%	n/a 41%	n/a 35%	
18.2.1	For each clearing service with ten or more members, but fewer than 25 members; Percentage of open positions held by the 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 five clearing members, including both house and client, in aggregate	Peak End of Day  Average End of Day  Peak End of Day	Quarterly	Percentage Percentage Percentage	n/a 22% 28%	n/a 41% 44%	n/a 35% 36%	
18.2.1 18.2.2 18.2.3	For each clearing service with ten or more members, but fewer than 25 members; Percentage of open positions held by the 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 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  Peak End of Day  Average End of Day	Quarterly	Percentage Percentage Percentage Percentage	n/a 22% 28% 35%	n/a 41% 44% 70%	n/a 35% 36% 54%	
18.2.1 18.2.2 18.2.3	For each clearing service with ten or more members, but fewer than 25 members; Percentage of open positions held by the 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 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  INTE 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  Peak End of Day  Average End of Day  Peak End of Day  Average End of Day	Quarterly	Percentage Percentage Percentage Percentage	n/a 22% 28% 35%	n/a 41% 44% 70%	n/a 35% 36% 54%	Under NSCC's and each of FICC Division's current rules and structure, they do not maintain separate
18.2.1 18.2.2 18.2.3	For each clearing service with ten or more members, but fewer than 25 members; Percentage of open positions held by the 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 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  Ire 18.3 - Initial Margin Concentration	Peak End of Day  Average End of Day  Peak End of Day  Average End of Day  Peak End of Day  Average End of Day		Percentage Percentage Percentage Percentage Percentage	n/a 22% 28% 35% 38%	n/a 41% 44% 70% 73%	n/a 35% 36% 54% 55%	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 deposits from their Members using a risk-based margin methodology. These amounts operate, individually, as the Member's margin, and
18.2.1 18.2.2 18.2.3	For each clearing service with ten or more members, but fewer than 25 members; Percentage of open positions held by the 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 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  IVE 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		Percentage Percentage Percentage Percentage Percentage Percentage	n/a 22% 28% 35% 38%	n/a 41% 44% 70% 73%	n/a 35% 36% 54% 55%	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
18.2.1 18.2.2 18.2.3 <b>Disclosu</b>	For each clearing service with ten or more members, but fewer than 25 members; Percentage of open positions held by the 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 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  ITE 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  Average End of Day  Peak End of Day		Percentage Percentage Percentage Percentage Percentage Percentage	n/a 22% 28% 35% 38%	n/a 41% 44% 70% 73%	n/a 35% 36% 54% 55%	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.
18.2.1 18.2.2 18.2.3 <b>Disclosu</b>	For each clearing service with ten or more members, but fewer than 25 members; Percentage of open positions held by the 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 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  IVE 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  Peak End of Day  Average End of Day		Percentage Percentage Percentage Percentage Percentage Percentage Percentage Percentage Percentage	n/a 22% 28% 35% 38%  n/a n/a 36%	n/a 41% 44% 70% 73%	n/a 35% 36% 54% 55%	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

18.4.1 For each segregated contributions to the segregated contributed by larger segregated contributed segregated contributed segregated contributed segregated segr	ed Default Fund Concentration  default fund with ten or more members, but fewer than 25 members; Percentage of participant default fund contributed by largest five clearing members in aggregate  default fund with 25 or more members; Percentage of participant contributions to the default fund dest five clearing members in aggregate  default fund with 25 or more members; Percentage of participant contributions to the default fund dest ten clearing members in aggregate	Quarterly/ Quarter End	Percentage Percentage	n/a	MBSD n/a	n/a	See Explanatory Note from 18.3
18.4.1 For each segregated contributions to the 18.4.2 For each segregated contributed by large 18.4.3 For each segregated contributed by large 18.4.3 For each segregated contributed by large 19.1.1 Number of clients (in 19.1.2 Number of direct materials). Percent of client training 19.1.4 Percent of client training.	d default fund with ten or more members, but fewer than 25 members; Percentage of participant default fund contributed by largest five clearing members in aggregate default fund with 25 or more members; Percentage of participant contributions to the default fund dest five clearing members in aggregate default fund with 25 or more members; Percentage of participant contributions to the default fund dest ten clearing members in aggregate	Quarterly/	Percentage	n/a		n/a	See Explanatory Note from 18.3
18.4.1 For each segregated contributions to the segregated contributed by larger 18.4.3 For each segregated contributed by larger 18.4.3 For each segregated contributed by larger 19.1.1 Number of clients (in 19.1.2 Number of direct material 19.1.3 Percent of client transport of client transport 19.1.4 Percent 19.1.4 Per	d default fund with ten or more members, but fewer than 25 members; Percentage of participant default fund contributed by largest five clearing members in aggregate default fund with 25 or more members; Percentage of participant contributions to the default fund dest five clearing members in aggregate default fund with 25 or more members; Percentage of participant contributions to the default fund dest ten clearing members in aggregate			·	n/a	n/a	See Explanatory Note from 18.3
Disclosure 19.1 - Tiered particular of clients (iii)  19.1.1 Number of clients (iii)  19.1.2 Number of clients (iii)  19.1.3 Percent of client tra  19.1.4 Percent of client tra  Disclosure 20.1 - FMI Links	default fund contributed by largest five clearing members in aggregate default fund with 25 or more members; Percentage of participant contributions to the default fund est five clearing members in aggregate default fund with 25 or more members; Percentage of participant contributions to the default fund est ten clearing members in aggregate			·	n/a	n/a	See Explanatory Note from 18.3
Disclosure 19.1 - Tiered particular of clients (in 19.1.2 Number of clients (in 19.1.3 Percent of client transport of client t	est five clearing members in aggregate  d default fund with 25 or more members; Percentage of participant contributions to the default fund est ten clearing members in aggregate		Percentage	n/a		1	
Disclosure 19.1 - Tiered particles of clients (in 19.1.2 Number of clients (in 19.1.3 Percent of client transport of client tr	est ten clearing members in aggregate				n/a	n/a	
19.1.1 Number of clients (i 19.1.2 Number of direct m 19.1.3 Percent of client tra 19.1.4 Percent of client tra  Disclosure 20.1 - FMI Links			Percentage	n/a	n/a	n/a	
19.1.2 Number of direct m  19.1.3 Percent of client tra  19.1.4 Percent of client tra  Disclosure 20.1 - FMI Links	articipation arrangements, measures of concentration of client clearing				1		
19.1.3 Percent of client tra  19.1.4 Percent of client tra  Disclosure 20.1 - FMI Links	f known)	Quarterly/ Quarter End	Count	n/a	n/a	n/a	See Explanatory Note from 14.1
19.1.4 Percent of client tra  Disclosure 20.1 - FMI Link	embers that clear for clients		Count	n/a	n/a	63	NSCC: Number denotes members that clear for other Broker/Dealers.
Disclosure 20.1 - FMI Link	nsactions attributable to the top five clearing members (if CCP has 10+ clearing members)		Percentage	n/a	n/a	n/a	See Explanatory Note from 14.1
	nsactions attributable to the top ten clearing members (if CCP has 25+ clearing members)		Percentage	n/a	n/a	n/a	See Explanatory Note from 14.1
20.1.1 Value of trades clea	s, Value of Trades						
	red 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 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 described in NSCC's Disclosure Framework under Principle 20. The GSD/CME Cross-Margining Agreement, which 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.
Disclosure 20.2 - FMI Links	s, Initial Margin or equivalent financial resources provided						
	uivalent financial resources provided to each linked CCP by the CCP to cover the potential future exposure n contracts cleared across link	Quarterly/ Quarter End	USD \$MM	n/a	n/a	n/a	See Explanatory Note from 20.1
Disclosure 20.3 - FMI Link	s, Initial Margin or equivalent financial resources collected						
20.3.1 Initial margin or equ		Quarterly/ Quarter End	USD \$MM	n/a	n/a	n/a	See Explanatory Note from 20.1

								A3 01 Julie 30, 2013
Disclosure Reference	Disclosure Description		Frequency	Data Type	GSD	FICC MBSD	NSCC	Explanatory Notes
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 equivalent financial resources held against each linked CCP fell below the actual marked-to-market exposure to that linked CCP – based on daily back testing 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 b Continuous or Once-a-day	observations (i.e. number of accounts multiplied by number of days covered in the back test); Intraday or			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	ure 20.5 - FMI Links, Additional pre-funded financial resources provided to							
20.5.1	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 part from the standard default fund	·	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	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 part from the standard default fund	·	Quarterly/ Quarter End	USD \$MM	n/a	n/a	n/a	See Explanatory Note from 20.1
Disclosu	ure 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 val cleared	/alue of trades subject to cross margining, by clearing service, as a percentage of total trade values/total notional values leared		Percentage	17%	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 of would otherwise have been held.	of total initial margin that		Percentage	0.17%	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	ire 23.1 - Disclosure of rules, key procedures, and market data; Average Daily \	/olumes						
23.1.1	Average Daily Volumes by Asset Class, CCY and OTC/ETD	ОТС	Quarterly		274,054	17,658	34,705,401	For GSD/MBSD and NSCC, average daily volume data is based on sides (as opposed to trades).  For NSCC: OTC: Includes OMGEO, NASDAQTRF, MUNI BONDS, FINRA ORF, ETF CR/RD, ECN/QSR, and
22.4.2	National Malaysia of Annals and an advantagles of Colored OTC/FTD	NSCC_Exchange		LICO CAMA	4 502 676	-	84,225,534	CORP/UIT Bonds For NSCC: Exchange: Includes OCC, NYSE ARCA, NYSE AMEX, NYSE2, NYSE, NYSE NATIONAL, NASDAQ
23.1.2	Notional Value of trades cleared by Asset Class, CCY and OTC/ETD	OTC  NSCC_Exchange		USD \$MM USD \$MM	4,503,676	400,895	555,192 481,911	PHLX, NASDAQ BX, NASDAQ, IEX EXCHANGE, DIRECT EDGE X, DIRECT EDGE A, CHX, BATS BYX and BATS
		NSCC_Exchange		OSD ŞIVIIVI	_		401,511	
Disclosu	re 23.2 - Disclosure of rules, key procedures, and market data; Non-Yet-Settle	d						
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	1,143	396	236	Sources: FICC and NSCC financial statements, as available in the DTCC public website
	rre 23.3 - Disclosure of rules, key procedures, and market data; Execution Facilincy: Quarterly	ity						
23.3.1	Average daily volumes submitted by Execution facility or matching/confirmation venue		Quarterly		n/a	n/a	See 23.1 above	For NSCC:  OTC - Includes OMGEO, NASDAQTRF, MUNI BONDS, FINRA ORF, ETF CR/RD, ECN/QSR, and CORP/UIT Bonds
23.3.2	Notional contract values submitted by Execution facility or matching/confirmation venue			USD \$MM	n/a	n/a	See 23.1 above	Exchange - Includes OCC, NYSE ARCA, NYSE AMEX, NYSE2, NYSE, NASDAQ PHLX, NASDAQ BX, NASDAQ, DIRECT EDGE X, DIRECT EDGE A, CHX, BATS BYX and BATS

Disclosure	Diselecture Description	Disclosure Description Frequency Data Type FICC						Explanatory Notes
Reference	Disclosure Description	Disclosure Description		рата туре	GSD	MBSD	NSCC	Explanatory Notes
Paymen	: Risk Committee Disclosure 1 - Concentration Measures							
	Initial Margin Required	Top 3 Members	Quarterly/ Quarter End	USD \$MM	5,327	1,578	1,305	
	Number of Members with x% of Initial Margin Requirement	> 20%		Count	0	1	0	Aggregated by deposit account.
		15% to 20%		Count	0	1	0	
		10% to 15%		Count	3	0	0	
		5% to 10%		Count	0	1	4	
		< 5%		Count	143	100	146	
	Total Initial Margin Posted (Market Value)	Total		USD \$MM	20,442	4,283	7,275	
Paymon	Risk Committee Disclosure 2 - Intial Margin Detail							

Total Initial Margin Posted (Market Value)	Total	USD \$MM	20,442	4,283	7,275	
Risk Committee Disclosure 2 - Intial Margin Detail						
Initial Margin Breakdown by Component	VaR / Volatility	Quarterly/ USD \$MM Quarter End	15,198	2,658	4,382	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 methodol
	Coverage Component (CC)	USD \$MM	n/a	n/a	15	the event of a significant vendor data disruption.  The Coverage Component is a back-test-like component that is meant to address potential mode deficiencies.  The Coverage Component is designed by NSCC to mitigate the risks associated with a Member's Required Deposit being insufficient to cover projected liquidation losses to the Coverage Target adjusting a Member's Required Deposit towards the Coverage Target.
	Blackout Period Exposure Adjustment	USD \$MM	1	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 Clear Fund Requirements (increase to Repo participants and decrease to Reverse Repo participants) is 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 E Period, the first 5 to 7 business days each month.
	CME Cross Margin	USD \$MM	-27	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-margi arrangement.
	Margin Req. Differential (MRD)	USD \$MM	n/a	n/a	1,082	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 n call will not be satisfied.
	Market to Market (MTM)	USD \$MM	n/a	0	137	As a cash market CCP, NSCC uses a continuous net system where securities within the settleme 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. 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 Deterministic Risk Component ("DRC") in the Clearing Fund Requirement that reflects mark-to-results on outstanding positions, regardless of settlement date, cash items and adjustments that the result of netting, and principal and interest exposure on failed positions. At least once daily calculates the DRC that reflects the mark-to-market of the portfolio to account for the different between the contract price and current market prices, interest and other cash settlement oblig DRC can be a credit or debit amount. If the DRC is a debit, this amount will increase the Clearing 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).
	Illiquid	USD \$MM	n/a	n/a	83	NSCC may apply an additional charge on positions in OTC Bulletin Board or Pink Sheet securities on size, average daily volume or price; and financial condition of the participant. This charge is separate from both VaR and SPC.
	Special Charge	USD \$MM	102	13	65	Special charges include backtesting charges and other Clearing Fund premiums.
	Other Charges	USD \$MM	221	601	725	At NSCC, includes FIS and CNS Fails charges. For GSD & MBSD, includes Membership Type Adjust