



Q4 2016

FIXED INCOME CLEARING CORPORATION

AND

NATIONAL SECURITIES CLEARING CORPORATION

QUANTITATIVE DISCLOSURES FOR CENTRAL COUNTERPARTIES

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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.

Disclosure					FI	ICC		
Reference	Disclosure Description		Frequency	Data Type	GSD	MBSD	NSCC	Explanatory Notes
Disclosu	ure 4.1 - Total value of default resources (excluding initial and retained	variation margin), split by cleari	ing service if defau	It funds are segr	egated by cleari	ng service		
4.1.1	Prefunded - Own Capital Before		Quarterly/ Quarter End	USD \$MM	3:	5.8	82.1	For NSCC, amount represents 25% of its Retained Earnings as at quarter end.
4.1.2	Prefunded - Own Capital Alongside			USD \$MM	n/a	n/a	n/a	FICC does not publish separate Retained Earnings balances for GSD and MBSD since each is a division operating within the legal entity FICC. The separate Rules of each of GSD and MBSD provide that each
4.1.3	Prefunded - Own Capital After			USD \$MM	n/a	n/a	n/a	of GSD and MBSD applies up to 25% (or more, if its Board determines) of FICC Retained Earnings in the event of a member default for which losses exceed the defaulting member's margin. Accordingly, the amount reported is equal to 25% of FICC Retained Earnings. If a member loss applies to both Divisions, FICC would allocate the amount reported to each Division in proportion to the respective Division-specific exposure.
4.1.4	Prefunded - Aggregate Participant Contributions - Required			USD \$MM	12,431	6,576	3,579	NSCC and each FICC Division calculates and collects Clearing Fund from its Members using a risk-based 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	15,532	7,413	4,389	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. FICC and NSCC are in the process of developing a proposal to establish guarantee funds to cover tail risk. The proposal is in the development stage, and will be subject to Member outreach and the Rule Filing process. If such a structure is implemented, it (and not the Clearing Fund) would serve as the financial resource for mutualization.
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 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	
	ure 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	239	n/a	n/a	
Disclosu	ure 4.3 - Value of pre-funded default resources (excluding initial and re	tained variation margin) held for	r each clearing ser	vice				
4.3.1	Cash deposited at a central bank of issue of the currency concerned	Pre Haircut	Quarterly/	USD \$MM	3,300	2,050	2,300	
		Post Haircut	Quarter End	USD \$MM	3,300	2,050	2,300	
4.3.2	Cash deposited at other central banks	Pre Haircut		USD \$MM	0	0	0	
				LICD CAAAA	0	0	0	
		Post Haircut		USD \$MM				
4.3.3	Secured cash deposited at commercial banks (including reverse repo)	Pre Haircut		USD \$MM	350	200	250	
		Pre Haircut Post Haircut		USD \$MM USD \$MM	350 357	200 204	250 255	See Evaluation Note from 4.1
4.3.4.1	Secured cash deposited at commercial banks (including reverse repo) Unsecured cash deposited at commercial banks	Pre Haircut Post Haircut Pre Haircut		USD \$MM USD \$MM USD \$MM	350 357 771	200 204 321	250 255 871	See Explanatory Note from 4.1
4.3.4.1	Unsecured cash deposited at commercial banks	Pre Haircut Post Haircut Pre Haircut Post Haircut		USD \$MM USD \$MM USD \$MM USD \$MM	350 357 771 771	200 204 321 321	250 255 871 871	
		Pre Haircut Post Haircut Pre Haircut Post Haircut Post Haircut		USD \$MM USD \$MM USD \$MM USD \$MM USD \$MM	350 357 771 771 1,581	200 204 321 321 1,088	250 255 871 871 737	See Explanatory Note from 4.1 See Explanatory Note from 4.1
4.3.4.1	Unsecured cash deposited at commercial banks	Pre Haircut Post Haircut Pre Haircut Post Haircut		USD \$MM USD \$MM USD \$MM USD \$MM	350 357 771 771	200 204 321 321	250 255 871 871	

sure	Disclosure Description		Frequency	Data Type	F	ICC	NSCC	Explanatory Notes
erence	Disclosure Description		riequency	Data Type	GSD	MBSD	NSCC	Explanatory Notes
isclosu	re 4.3 - Value of pre-funded default resources (excluding initial	and retained variation margin) hel	d for each clearing ser	vice - Cont'd				
4.3.5	Non-Cash Sovereign Government Bonds - Domestic	Pre Haircut	Quarterly/	USD \$MM	8,939	3,328	244	See Explanatory Note from 4.1
		Post Haircut	Quarter End	USD \$MM	8,648	3,198	237	
.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	1,122	448	0	See Explanatory Note from 4.1
		Post Haircut		USD \$MM	1,043	416	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	
.3.10	Non-Cash Equities	Pre Haircut		USD \$MM	0	0	0	
		Post Haircut		USD \$MM	0	0	0	
1.3.11	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	
3.14	Non-Cash Commodities - Other	Pre Haircut		USD \$MM	0	0	0	
		Post Haircut		USD \$MM	0	0	0	

Disclosur	e 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	1,129	1,127	820	
	transactions cleared for indirect participants) in extreme but plausible market conditions. (Previous 12 Months)	Mean Avg/ Previous 12 Months		USD \$MM	934	583	286	
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	605	349	45	Amount represents Peak/Average VaR model back test results.
	participants) (Previous 12 Months)	Avg/ Previous 12 Months		USD \$MM	32	46	3	
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	2,001	1,531	1,457	
	(including transactions cleared for indirect participants) in extreme but plausible market conditions (Previous 12 Months)	Mean Avg/ Previous 12 Months		USD \$MM	1,668	848	431	
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 much.			Bus. Days	0	0	0	

isclosure	Disclosure Description		Fraguency	Data Tura	F	ICC	NECC	Evolonatam Natas
eference	Disclosure Description		Frequency	Data Type	GSD	MBSD	NSCC	Explanatory Notes
Disclosur	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	
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 transactions cleared for	Peak Day/ Previous 12 Months		USD \$MM	1,050	606	55	Amount represents Peak/Average VaR model back test results.
	indirect participants)? (Previous 12 Months)	Avg/ Previous 12 Months		USD \$MM	50	77	4	
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 are made	Website/ Hyperlink	c.com/~/media/	com/~/media/Fil es/Downloads/le gal/rules/ficc_mb	http://www.dtcc. com/~/media/Fil es/Downloads/le gal/rules/nscc_ru	
					gov rules.pdf Section:	sd_rules.pdf Section: "SCHEDULE OF	les.pdf Section: "PROCEDURE	
					"SCHEDULE OF HAIRCUTS FOR ELIGIBLE CLEARING FUND	HAIRCUTS FOR ELIGIBLE CLEARING FUND SECURITIES"	XV", "III. Collateral Value of Eligible Clearing Fund	
					SECURITIES"		Securities"	
Disclosur	e 5.2 - Assets Eligible for pre-funded participant contributions to the default r	resources, and the respe	ective haircuts appli	ed (if different	SECURITIES"		Securities"	
	re 5.2 - Assets Eligible for pre-funded participant contributions to the default r Assets Eligible for pre-funded participant contributions to the default resources, and the respect different from 5.1)		Update as changes are made	ed (if different	SECURITIES"	See 5.1 above	Securities" See 5.1 above	
5.2.1	Assets Eligible for pre-funded participant contributions to the default resources, and the respect		Update as changes	ed (if different	SECURITIES" from 5.1)	See 5.1 above		
5.2.1	Assets Eligible for pre-funded participant contributions to the default resources, and the respect different from 5.1)		Update as changes	ed (if different	SECURITIES" from 5.1)	See 5.1 above		
5.2.1 Disclosur	Assets Eligible for pre-funded participant contributions to the default resources, and the respect different from 5.1) The S.3 - Results of testing of haircuts		Update as changes are made		securities" from 5.1) See 5.1 above		See 5.1 above	See Explanatory Note from 4.4.2
5.2.1 Disclosur 5.3.1	Assets Eligible for pre-funded participant contributions to the default resources, and the respect different from 5.1) Te 5.3 - Results of testing of haircuts Confidence interval targeted through the calculation of haircuts		Update as changes are made	Percentage	SECURITIES" : from 5.1) See 5.1 above	99%	See 5.1 above	See Explanatory Note from 4.4.2
5.2.1 Disclosur 5.3.1 5.3.2	Assets Eligible for pre-funded participant contributions to the default resources, and the respect different from 5.1) Te 5.3 - Results of testing of haircuts Confidence interval targeted through the calculation of haircuts Assumed holding/liquidation period for the assets accepted Look-back period used for testing the haircuts Number of days during the look-back period on which the fall in value during the assumed		Update as changes are made	Percentage	SECURITIES" From 5.1) See 5.1 above 99% 3 Days	99% 3 Days	99% 3 Days	For Treasuries based on a 10 yr. look-back, 1 day for 20 yr. and 11 days for 30 yr. tenors were obse
5.2.1 Disclosur 5.3.1 5.3.2 5.3.3	Assets Eligible for pre-funded participant contributions to the default resources, and the respect different from 5.1) Te 5.3 - Results of testing of haircuts Confidence interval targeted through the calculation of haircuts Assumed holding/liquidation period for the assets accepted Look-back period used for testing the haircuts	Treasury Agency	Update as changes are made	Percentage Bus. Days Bus. Days Bus. Days	SECURITIES" From 5.1) See 5.1 above 99% 3 Days 10 years 10 0	99% 3 Days 10 years n/a 0	99% 3 Days 10 years n/a n/a	For Treasuries based on a 10 yr. look-back, 1 day for 20 yr. and 11 days for 30 yr. tenors were obse where a change in rate caused a breach in respective HC. The total day count for Treasuries is 11 (a
5.2.1 Disclosur 5.3.1 5.3.2 5.3.3	Assets Eligible for pre-funded participant contributions to the default resources, and the respect different from 5.1) Te 5.3 - Results of testing of haircuts Confidence interval targeted through the calculation of haircuts Assumed holding/liquidation period for the assets accepted Look-back period used for testing the haircuts Number of days during the look-back period on which the fall in value during the assumed	ive haircuts applied (if	Update as changes are made	Percentage Bus. Days Bus. Days	SECURITIES" From 5.1) See 5.1 above 99% 3 Days 10 years	99% 3 Days 10 years n/a	99% 3 Days 10 years n/a	For Treasuries based on a 10 yr. look-back, 1 day for 20 yr. and 11 days for 30 yr. tenors were obsewhere a change in rate caused a breach in respective HC. The total day count for Treasuries is 11 (
5.2.1 Disclosur 5.3.1 5.3.2 5.3.3	Assets Eligible for pre-funded participant contributions to the default resources, and the respect different from 5.1) Te 5.3 - Results of testing of haircuts Confidence interval targeted through the calculation of haircuts Assumed holding/liquidation period for the assets accepted Look-back period used for testing the haircuts Number of days during the look-back period on which the fall in value during the assumed	Treasury Agency Mortgages	Update as changes are made Quarterly	Percentage Bus. Days Bus. Days Bus. Days	SECURITIES" From 5.1) See 5.1 above 99% 3 Days 10 years 10 0	99% 3 Days 10 years n/a 0	99% 3 Days 10 years n/a n/a	For Treasuries based on a 10 yr. look-back, 1 day for 20 yr. and 11 days for 30 yr. tenors were obsewhere a change in rate caused a breach in respective HC. The total day count for Treasuries is 11 (day caused the breach in both tenors, 20 & 30 yr.). For Agencies and Mortgages no breaches were
5.2.1 Disclosur 5.3.1 5.3.2 5.3.3 5.3.4 Disclosur	Assets Eligible for pre-funded participant contributions to the default resources, and the respect different from 5.1) The 5.3 - Results of testing of haircuts Confidence interval targeted through the calculation of haircuts Assumed holding/liquidation period for the assets accepted Look-back period used for testing the haircuts 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. The 6.1 - Total initial margin required split by house, client gross, client net and	Treasury Agency Mortgages total (if not segregated)	Update as changes are made Quarterly	Percentage Bus. Days Bus. Days Bus. Days Bus. Days	99% 3 Days 10 years 10 0	99% 3 Days 10 years n/a 0	99% 3 Days 10 years n/a n/a n/a	For Treasuries based on a 10 yr. look-back, 1 day for 20 yr. and 11 days for 30 yr. tenors were obsewhere a change in rate caused a breach in respective HC. The total day count for Treasuries is 11 (day caused the breach in both tenors, 20 & 30 yr.). For Agencies and Mortgages no breaches were observed under current HCs.
5.2.1 Disclosur 5.3.1 5.3.2 5.3.3 5.3.4 Disclosur	Assets Eligible for pre-funded participant contributions to the default resources, and the respect different from 5.1) Te 5.3 - Results of testing of haircuts Confidence interval targeted through the calculation of haircuts Assumed holding/liquidation period for the assets accepted Look-back period used for testing the haircuts 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 Mortgages total (if not segregated)	Update as changes are made Quarterly	Percentage Bus. Days Bus. Days Bus. Days Bus. Days	99% 3 Days 10 years 10 0 12,431	99% 3 Days 10 years n/a 0 0	99% 3 Days 10 years n/a n/a n/a 3,579	For Treasuries based on a 10 yr. look-back, 1 day for 20 yr. and 11 days for 30 yr. tenors were obsewhere a change in rate caused a breach in respective HC. The total day count for Treasuries is 11 (day caused the breach in both tenors, 20 & 30 yr.). For Agencies and Mortgages no breaches were
5.2.1 Disclosur 5.3.1 5.3.2 5.3.3 5.3.4	Assets Eligible for pre-funded participant contributions to the default resources, and the respect different from 5.1) The 5.3 - Results of testing of haircuts Confidence interval targeted through the calculation of haircuts Assumed holding/liquidation period for the assets accepted Look-back period used for testing the haircuts 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. The 6.1 - Total initial margin required split by house, client gross, client net and	Treasury Agency Mortgages total (if not segregated)	Update as changes are made Quarterly	Percentage Bus. Days Bus. Days Bus. Days Bus. Days	99% 3 Days 10 years 10 0	99% 3 Days 10 years n/a 0	99% 3 Days 10 years n/a n/a n/a	For Treasuries based on a 10 yr. look-back, 1 day for 20 yr. and 11 days for 30 yr. tenors were obs where a change in rate caused a breach in respective HC. The total day count for Treasuries is 11 day caused the breach in both tenors, 20 & 30 yr.). For Agencies and Mortgages no breaches were observed under current HCs.

Disclarate s.2. For each clearing service, total initial margin required, split by house and client for combined total if not segregated: 100	Disclosure	Disclosure Description	Erec	Eroguongy	Frequency Data Type	F	ICC	NECC	Finding town Nation
1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Reference	Disclosure Description		rrequency	Data Type	GSD	MBSD	NSCC	Explanatory Notes
Hause M Facilitation Climate M Annual Harden Climate M Annual Harden Climate M Facilitation Climate M Facilitat	Disclosur	e 6.2 - For each clearing service, total initial margin required, split by hous	se and client (or combined t	total if not segrega	ted)				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.
Clear M Per Name Services	6.2.1	Cash deposited at a central bank of issue of the currency concerned	House IM Pre Haircut	Quarterly	USD \$MM	n/a	n/a	n/a	
Cart In Process Harmont Total In Min Price Harmont Total In Min Price Harmont Total In Min Price Harmont Collect In Price Harmont Total In Min Price Harmont Collect In P			House IM Post Haircut		USD \$MM	n/a	n/a	n/a	
Solid Min Per Service Soli			Client IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
Total Min Park Selected 100 Min Min Park Selected 100 Min			Client IM Post Haircut		USD \$MM	n/a	n/a	n/a	
Black Mil Piet Harrord House Mil Piet Harrord GLOS Milm Mill Mill Mill Mill Piet Harrord GLOS Mill Mill Mill Mill Mill Mill Mill Mil			Total IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
House Mil Not Helsout Client Mil Yes Service Client Mil Yes Servi			Total IM Post Haircut		USD \$MM	n/a	n/a	n/a	
Client IM Pre-Inducts Clie	6.2.2	Cash deposited at other central banks	House IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
Client M Port Marcut Total MP Port Marcut USD SMM			House IM Post Haircut		USD \$MM	n/a	n/a	n/a	
Teal IM Pre- Islandar Teal			Client IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
Partial M Price Natural Partial M Price			Client IM Post Haircut		USD \$MM	n/a	n/a	n/a	
August Micro Park Harrord House Micro Park H			Total IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
Holise Mil Most Halarcat Client Mil Post Halarcat USD SMM			Total IM Post Haircut		USD \$MM	n/a	n/a	n/a	
Client MP Pot Haircut Clie	6.2.3	Secured cash deposited at commercial banks (including reverse repo)	House IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
Client M Poet National Total IM Pre Harrout Client M Pre Harrout Total IM Pre Harrout House M Pre Harrout Total IM Pre Harrout House M Pre Harrout Client M Pre Harrout House M Pre Harrout House M Pre Harrout House M Pre Harrout Client M Pre Harrout House M Pre Harrout House M Pre Harrout USD SMM			House IM Post Haircut		USD \$MM	n/a	n/a	n/a	
Total IM Pre-Harrout Total IM Pre-Harrout USD SMM			Client IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
Total M Post Haircut USD SMM			Client IM Post Haircut		USD \$MM	n/a	n/a	n/a	
1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00			Total IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
House IM Post Haircut USD SMM			Total IM Post Haircut		USD \$MM	n/a	n/a	n/a	
Client IM Pre Naircut Clie	6.2.4	Unsecured cash deposited at commercial banks	House IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
Client IM Post Haircut USD SMM			House IM Post Haircut		USD \$MM	n/a	n/a	n/a	
Total IM Pre Haircut Total IM Pre Haircut Total IM Pre Haircut Total IM Pre Haircut USD SMM			Client IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
Total IM Post Haircut 6.2.5 Non-Cash Sovereign Government Bonds - Domestic House IM Poet Haircut House IM Poet Haircut Client IM Poet Haircut Client IM Poet Haircut Total IM Pre Haircut House IM Poet Haircut Total IM Pre Haircut House IM Poet Haircut USD SMM N/a			Client IM Post Haircut		USD \$MM	n/a	n/a	n/a	
August Mon-Cash Sovereign Government Bonds - Domestic House IM Post Haircut House IM Post Haircut USD SMM			Total IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
House IM Post Haircut Client IM Pre Haircut Client IM Pre Haircut Client IM Pre Haircut Total IM Prest Haircut Total IM Post Haircut Total IM Prest Haircut USD SMM n/a			Total IM Post Haircut		USD \$MM	n/a	n/a	n/a	
Client IM Pre Haircut USD SMM n/a	6.2.5	Non-Cash Sovereign Government Bonds - Domestic	House IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
Client IM Post Haircut Total IM Pre Haircut Flows IM Pre Haircut USD SMM N/a			House IM Post Haircut		USD \$MM	n/a	n/a	n/a	
Total IM Pre Haircut Total IM Post Haircut Figure 1 Fi			Client IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
Total IM Post Haircut Boundary From Haircut For House IM Post Haircut Fo			Client IM Post Haircut		USD \$MM	n/a	n/a	n/a	
6.2.6 Non-Cash Sovereign Government Bonds - Other House IM Pre Haircut House IM Pre Haircut Client IM Pre Haircut USD \$MM n/a n/a n/a n/a n/a n/a n/a n			Total IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
House IM Post Haircut Client IM Pre Haircut USD \$MM			Total IM Post Haircut		USD \$MM	n/a	n/a	n/a	
Client IM Pre Haircut USD \$MM n/a	6.2.6	Non-Cash Sovereign Government Bonds - Other	House IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
Client IM Post Haircut Total IM Pre Haircut USD \$MM			House IM Post Haircut		USD \$MM	n/a	n/a	n/a	
Total IM Pre Haircut USD \$MM n/a n			Client IM Pre Haircut		USD \$MM	n/a	n/a	n/a	
Total IM Post Haircut			Client IM Post Haircut		USD \$MM	n/a	n/a	n/a	
Non-Cash Agency Bonds			Total 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	
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	6.2.7	Non-Cash Agency Bonds	House 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			House IM Post Haircut		USD \$MM	n/a	n/a	n/a	
Total IM Pre Haircut USD \$MM			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			Total IM Post Haircut		USD \$MM	n/a	n/a	n/a	

Disclosure	Disclosure Description		Frequency	Data Type	F	ICC	NSCC	Explanatory Notes
Reference					GSD	MBSD	NSCC	Explanatory notes
Disclosu	re 6.2 - For each clearing service, total initial margin required, split	by house and client (or combined t	otal if not segrega	ited) (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.
6.2.8	Non-Cash State/municipal 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	
6.2.9	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		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	
6.2.14	Non-Cash - 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	

Disclosure 6.4 - 6.4.4 Type o design Disclosure 6.5 -	- For each clearing service, total initial margin required, split by house and deposited at a central bank of issue of the currency concerned; Total (if not segregated) - Initial Margin rates on individual contracts, where the CCP sets such rates I Margin rates on individual contracts where the CCP sets such rates - Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing	House IM Pre Haircut House IM Post Haircut Client IM Pre Haircut Client IM Post Haircut Total IM Post Haircut Total IM Post Haircut tes egation) for each cleari	Update as changes are made	USD \$MM	n/a n/a n/a n/a n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a n/a n/a n/a	Explanatory Notes 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 6.4 - 6.4.4 Type o design Disclosure 6.5 -	deposited at a central bank of issue of the currency concerned; Total (if not segregated) - Initial Margin rates on individual contracts, where the CCP sets such ra I Margin rates on individual contracts where the CCP sets such rates - Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing	House IM Pre Haircut House IM Post Haircut Client IM Pre Haircut Client IM Post Haircut Total IM Post Haircut Total IM Post Haircut tes egation) for each cleari	Update as changes are made	USD \$MM USD \$MM USD \$MM USD \$MM USD \$MM	n/a n/a n/a n/a n/a	n/a n/a n/a n/a	n/a n/a n/a n/a	
Disclosure 6.3 - 6.3.1 Initial I Disclosure 6.4 - 6.4.4 Type of design Disclosure 6.5 -	- Initial Margin rates on individual contracts, where the CCP sets such rates I Margin rates on individual contracts where the CCP sets such rates - Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing	House IM Post Haircut Client IM Pre Haircut Client IM Post Haircut Total IM Pre Haircut Total IM Post Haircut tes egation) for each cleari	are made	USD \$MM USD \$MM USD \$MM USD \$MM	n/a n/a n/a n/a n/a	n/a n/a n/a n/a	n/a n/a n/a n/a	
Disclosure 6.4 - 6.4.4 Type o design Disclosure 6.5 -	I Margin rates on individual contracts where the CCP sets such rates - Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing	Client IM Pre Haircut Client IM Post Haircut Total IM Pre Haircut Total IM Post Haircut tes egation) for each cleari	are made	USD \$MM USD \$MM USD \$MM	n/a n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	
Disclosure 6.4 - 6.4.4 Type o design Disclosure 6.5 -	I Margin rates on individual contracts where the CCP sets such rates - Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing	Client IM Post Haircut Total IM Pre Haircut Total IM Post Haircut tes egation) for each cleari	are made	USD \$MM USD \$MM	n/a n/a n/a	n/a n/a	n/a n/a	
Disclosure 6.4 - 6.4.4 Type o design Disclosure 6.5 -	I Margin rates on individual contracts where the CCP sets such rates - Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing	Total IM Pre Haircut Total IM Post Haircut tes egation) for each cleari	are made	USD \$MM	n/a n/a	n/a	n/a	
Disclosure 6.4 - 6.4.4 Type o design Disclosure 6.5 -	I Margin rates on individual contracts where the CCP sets such rates - Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing	Total IM Post Haircut tes egation) for each cleari	are made	-	n/a			
Disclosure 6.4 - 6.4.4 Type o design Disclosure 6.5 -	I Margin rates on individual contracts where the CCP sets such rates - Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing	tes egation) for each cleari	are made	OSD SININI		11/0	nyu	
Disclosure 6.4 - 6.4.4 Type o design Disclosure 6.5 -	I Margin rates on individual contracts where the CCP sets such rates - Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing	egation) for each cleari	are made		n/a			
Disclosure 6.4 - 6.4.4 Type o design Disclosure 6.5 -	- Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing		are made		n/a			
6.4.4 Type o design Disclosure 6.5 -	of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing		ing service and the	I	,	n/a	n/a	
Disclosure 6.5 -			ing service and the	key model desig	gn parameters for	r each initial marg	in model applied	to that clearing service
Disclosure 6.5 -		service and the key model	Update as changes		Historical	Historical	Parametric	
	n parameters for each initial margin model applied to that clearing service		are made		Simulation + Haircut	Simulation + Haircut	VaR + Haircut	
					Haircut	Haircat		
6.5.1 Number	- Results of back-testing of initial margin. At a minimum, this should incl	ude, for each clearing s	ervice and each ini	tial margin mod	el applied to that	t clearing service		
fell bel	ber of times over the past twelve months that margin coverage held against any account elow the actual marked-to-market exposure of that member account – based on daily testing results	Once-a-day/ Previous 12 Months	Quarterly	Count	215	84	54	
6.5.2 Number	ber of observations ([Number of accounts * number of days])	Previous 12 Months		Count	26,670	29,750	33,060	
6.5.3 Achiev	eved coverage level [aggregate CCP-level backtest coverage]	Previous 12 Months		Percentage	99.2%	99.5%	99.8%	
6.5.4 Where	re breaches of initial margin coverage (as defined in 6.5(a)) have occurred, report on size	Peak Size/		USD \$MM	682	360	12	
	covered exposure	Previous 12 Months		σσσ φ	002			
	re breaches of initial margin coverage (as defined in 6.5(a)) have occurred, report on size occurred exposure	Average Size/ Previous 12 Months		USD \$MM	34	16	1	
Disclosure 6.6 -	- Average Total Variation Margin Paid to the CCP by participants each bu	ısiness						
6.6.1 Averag	age Total Variation Margin Paid to the CCP by participants each business day	Average	Quarterly	USD \$MM	1,339	2,256	288	For GSD, VM is a cash pass-through process across the members; for MBSD and NSCC, VM charges are included as part of the Clearing Fund requirements.
								MTM debits were aggregated across all members to reflect the variation margin paid to all members.
Disclosure 6.7 -	- Maximum total variation margin paid to the CCP on any given business	day over the period						
6.7.1 Maxim	mum total variation margin paid to the CCP on any given business day over the period	Maximum	Quarterly	USD \$MM	2,940	5,214	1,026	See Explanatory Note from 6.6

CPIVII-	IOSCO Quantitative Disclosures - DICC							Q4 2016 (AS OF December 31, 2016)
Disclosure	Disclosure Description		Frequency	Data Type		icc	NSCC	Explanatory Notes
Reference			,	Juliu Type	GSD	MBSD		- Apalliston y rector
Disclosi	ure 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	2,551	1,139	1,123	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.
Disclosi	ure 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	Size and composition of qualifying liquid resources for each clearing service; (a) Cash deposited at a central bank of issue of the currency concerned			USD \$MM	3,300	2,050	4,851	
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	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	350	200	250	
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	771	321	871	
		Money Market Funds		USD \$MM	1,581	1,088	737	
		US Treasury Bills		USD \$MM	n/a	25	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 e committed repos			USD \$MM	n/a	23,054	10,855	For MBSD, 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.
7.1.7	Size and composition of qualifying liquid resources for each clearing service; (f) unsecured commented the CCP may draw without providing collateral/security)	itted 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 marketabl and investments that are readily available and convertible into cash with prearranged and highly arrangements even in extreme but plausible market conditions			USD \$MM	10,061	3,776	244	Amounts include Clearing Fund securities.
7.1.9	Size and composition of qualifying liquid resources for each clearing service; (h) other			USD \$MM	42,729	758	0 n/a	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. December 30 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 12/30 there were no SLD deposits on hand) Resources reported in Section 7.1 are as of 12/30/16 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 procedure, and governance arrangement around such decision making.	any applicable rule, policy,			n/a	n/a	n/a	

Disclosure	Disclarus Description	Funning	Data Tona	F	ICC	NICCO	Further Notes
Reference	Disclosure Description	Frequency	Data Type	GSD	MBSD	NSCC	Explanatory Notes
Disclosu	re 7.2 - Size and composition of any supplementary liquidity risk resources for each clearing service a	bove those qualifyi	ng 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	MBSD can use	NSCC can use collateralized	
	resources in 7.1	Quarter End		collateralized loans from clearing banks	collateralized loans from clearing banks	loans/equity repo	
				as additional	as additional	utilizing the cash	
				liquidity resources.	liquidity resources.	market securities	
						that were destined	
						to defaulter as collateral.	
						conaterai.	
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	Forward looking/	USD \$MM	64,971	18,740	24,629	For GSD and MBSD, values are estimated liquidity obligations that are based on trades that are due to
	the default of any single participant and its affiliates (including transactions cleared for indirect participants) in extreme but	Quarterly					settle the following business day.
	plausible market conditions						5 1000
							For NSCC, values are estimated liquidity obligations that are based on an Accelerated Trade Guarantee ("ATG") which covers the multi-day obligations throughout the (T+3) settlement cycle plus the Long
							Allocation 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	Quarterly	Bus. Days	0	0	0	
	available at the point the breach occurred), and by how much.	,	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	66,300	18,740	7,115	GSD/MBSD/NSCC did not utilize any of its liquidity resources to cover any member payment obligation
	cleared for indirect participants) over the past twelve months; reak day amount in previous twelve months						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.
7.3.4	Estimated largest same-day and, where relevant, intraday and multiday payment obligation in each relevant currency that	Forward looking/	USD \$MM	64,971	18,740	24,629	See Explanatory Note from 7.3.1
	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	Quarterly					
	participants) in extreme bat plausible market conditions						
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	re 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.
42.4.2				- /-		- /-	SCIVICOS.
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
12.1.2	Describes of attlements being by effected wines D.D. attlements and beginn		D	- /-	- 1-	- /-	mechanism.
12.1.3	Percentage of settlements by value effected using a PvP settlement mechanism		Percentage	n/a	n/a	n/a	
Disclosu	re 12.2 - Percentage of settlements by volume effected using a DvP, DvD or PvP settlement mechanis	m					
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.
			_				SCI VILES.
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	

Operator End Construction Constr						FICC		
Disclosure 13.1 - Quantitative information related to defaults 11.1 Quantitative information related to defaults among of excess sensor of elide image 12.1 Quantitative information related to defaults. Among of other flowed excurses sensor of elide image 12.1 Quantitative information related to defaults. Among of other flowed excurses used to cover bose. 12.1 Quantitative information related to defaults. Among of other flowed excurses used to cover bose. 12.1 Quantitative information related to defaults. Among of other flowed excurses of the public image. 12.1 Quantitative information related to defaults. Appropriate electrones of their public information related to defaults. Appropriate electrones of the public information related to defaults. Appropriate electrones of the public information related to defaults. Appropriate electrones of the public information related to defaults. Appropriate electrones of the public information related to defaults. Appropriate electrones of the public information related to defaults. Appropriate electrones of the public information related to defaults. Appropriate electrones of the public information related to the control of the		Disclosure Description	Frequency	Data Type			NSCC	Explanatory Notes
22.1.1 Os anillate information records to defaults, Amount of order to exceed to defaults, Amount of order published movement stated to the defaults. 23.1.1 Operations information related to defaults, Agrangeated scoopers of the settlement value of securities transactions 24.1.1 Total Client Positions held as a share of notional values cleared or of the settlement value of securities transactions 24.1.1 Total Client Positions held as a share of notional values cleared or of the settlement value of securities transactions 24.1.1 Total Client Positions held as a share of notional values cleared or of the settlement value of securities transactions 24.1.1 Total Client Positions held as a share of notional values cleared or of the settlement value of securities transactions 25.1.1 Value of least records held in leastly agranged accounts. When the LDC exceeds 25.1.1 Share Client Positions held in leastly agranged as a share of moving demonstrate statements. Share MDC and PCC Docceans Foresearch, discounts and the share of the s		us 12.1. Overstitetive information related to defectly			GSD	MBSD		
21.1 Quantitative information educat to educatio, Anousin of other frontal resources and to ever rooses 21.1 Quantitative information education education, Proportion of client positions and an education of education, Proportion of client positions and an a share of motional values cleared or of the settlement value of securities transactions Disclosure 24.1 Total Client Positions held as a share of motional values cleared or of the settlement value of securities transactions Disclosure 24.1 Total Client Positions held as a share of motional values cleared or of the settlement value of securities transactions Disclosure 24.1 Total Client Positions held as a share of motional values cleared or of the settlement value of securities transactions Disclosure 24.1 Total Client Positions held as a share of motional values cleared or of the settlement value of securities transactions Disclosure 24.1 Total Client Positions held as a share of motional values cleared or of the settlement value of securities transactions Disclosure 24.1 Total Client Positions held a membra demonstrate position in held disally sequence of the US claim markets. Soc 1950 or 950 Obstices of the US claim markets. Soc 1950 or 950 Obstices of the US claim markets. Soc 1950 or 950 Obstices of the US claim markets. Soc 1950 or 950 Obstices of the US claim markets. Soc 1950 or 950 Obstices of the US claim markets. Soc 1950 or 950 Obstices of the US claim markets. Soc 1950 or 950 Obstices of the US claim markets. Soc 1950 or 950 Obstices of the US claim markets. Soc 1950 or 950 Obstices of the US claim markets. Soc 1950 or 950 Obstices of the US claim markets. Soc 1950 or 950 Obstices of the US claim markets. Soc 1950 or 950 Obstices of the US claim markets. Soc 1950 or 950 Obstices of the US claim markets. Soc 1950 or 950 Obstices of the US claim markets. Soc 1950 or 950 Obstices of the US claim markets. Soc 1950 or 950 Obstices of the US claim markets. Soc 1950 or 950 Obstices of the US claim markets. Soc 1950 or 950 Obstices of t	Disclosu	re 13.1 - Quantitative information related to defaults						
11.1.1 Countries before matter and author properties of their profit has devise analyzance of their profit has devise analyzance of their profit has devise analyzance of the settlement value of securities transactions 1.1.1	13.1.1	Quantitative information related to defaults; Amount of loss versus amount of initial margin	Ad-hoc		n/a	n/a	n/a	
Disclosure 3.4.1—Total Client Positions held as a share of notional values cleared or of the settlement value of securities transactions 25.1.1 Total Client Positions held as a share of notional values cleared or of the settlement value of securities transactions 26.1.2 Total Client Positions held as a share of notional values cleared or of the settlement value of securities transactions 26.1.3 Total Client Positions held as a share of notional values cleared or of the settlement value of securities transactions 26.1.3 Total Client Positions held as a share of notional values cleared or of the settlement value of securities transactions 26.1.3 Total Client Positions held as a share of notional values cleared or of the settlement value of securities transactions 26.1.3 Total Client Positions held in ending of the decision of the	13.1.2	Quantitative information related to defaults; Amount of other financial resources used to cover losses			n/a	n/a	n/a	
Disclosure 14.1 - Total Client Positions Neld as a share of notional values cleared or of the settlement value of securities transactions 14.1.1 Total Client Positions Neld as a share of notional values cleared or of the settlement value of securities 14.1.2 Total Client Positions Neld in Individually segregated accounts 14.1.3 Total Client Positions Neld in Individually segregated accounts 14.1.3 Total Client Positions Neld in Individually segregated accounts 14.1.3 Total Client Positions Neld in Individually segregated accounts 14.1.3 Total Client Positions Neld in Individually segregated accounts 14.1.4 Total Client Positions Neld in Individually segregated accounts 14.1.5 Total Client Positions Neld in Individually segregated accounts, other than 180C accounts 14.1.5 Total Client Positions Neld in Individually segregated accounts, other than 180C accounts 14.1.5 Total Client Positions Neld in Individually segregated accounts, other than 180C accounts 14.1.5 Total Client Positions Neld in Individually segregated accounts, other than 180C accounts 14.1.5 Total Client Positions Neld in Individually segregated accounts, other than 180C accounts 14.1.5 Total Client Positions Neld in Individually segregated accounts, other than 180C accounts in Individually segregated accounts in Individually segregated accounts in Individually segregated accounts in In	13.1.3	Quantitative information related to defaults; Proportion of client positions closed-out/ported			n/a	n/a	n/a	
14.1.1 Total Client Positors held in individually segregated accounts Countrelly/ Quarter Find N/e N/	13.1.4	Quantitative information related to defaults; Appropriate references to other published material related to the defaults			n/a	n/a	n/a	
Counter End 14.12 Total Client Positions held in continuous client-colly accounts, other than LSOC accounts 14.13 Total Client Positions held in legally segregated but operationally comingfed (ISOC) accounts 14.14 Total Client Positions held in legally segregated but operationally comingfed (ISOC) accounts 15.14 Total Client Positions held in legally segregated but operationally comingfed (ISOC) accounts 15.15 Value of liquid net assets funded by equity 15.11 Value of liquid net assets funded by equity 15.12 Six months of current operating expenses 15.24 General business risk; Financial Disclosures 15.25 General Business risk; Financial Disclosures 15.26 Total Eventure 15.27 Total Eventure 15.28 Total Eventure 15.29 Total Eventure 15.24 Total Eventure 15.25 Total Liabilities 15.26 Explain if cililateral posted by clearing participants is held on patience Sheet 15.26 Collateral is held on Balance Sheet 15.26 Collateral is held on Balance Sheet 15.27 Collateral is held on Balance Sheet 15.28 Collateral is held on Balance Sheet 15.29 Explain if cililateral posted by clearing participants is held on Balance Sheet 15.29 Collateral is held on Balance Sheet	Disclosu	re 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 legally segregated but operationally comingled (LSOC) accounts Percentage 100% 100% 100% Values representative of the 2016 Annual Audited Financial Statements. Values willing publication of the 2017 Annual Audited Financial Statements (Q4 2017). 15.1.1 Value of liquid net assets funded by equity 15.1.2 Six months of current operating expenses USD SMM 210 314 Disclosure 15.2.2 General business risk; Financial Disclosures Values representative of the 2016 Annual Audited Financial Statements (Q4 2017). 15.1.2 Six months of current operating expenses USD SMM 86 139 Disclosure 15.2.2 General business risk; Financial Disclosures Values representative of the 2016 Annual Audited Financial Statements (Q4 2017). 15.2.1 Total Revenue Annual USD SMM 212 379 15.2.2 Total Expenditure USD SMM 215 302 15.2.3 Profits USD SMM 22, 578 7,381 15.2.4 Total Assets USD SMM 23, 348 6,983 15.2.6 Explain if collateral posted by clearing participants is held on salance Sheet Collateral is held on Balance Sheet Collateral is held on Balance Sheet	14.1.1	Total Client Positions held in individually segregated accounts			n/a	n/a	n/a	Not applicable for the US cash markets. See NSCC and FICC Disclosure Frameworks, Principle 14 discussion.
Percentage 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 1	14.1.2	Total Client Positions held in omnibus client-only accounts, other than LSOC accounts			n/a	n/a	n/a	
Disclosure 15.1 - General business risk Values representative of the 2016 Annual Audited Financial Statements. Values will publication of the 2017 Annual Audited Financial Statements (Q4 2017). 15.1.1 Value of liquid net assets funded by equity 15.1.2 Six months of current operating expenses USD SMM 86 139 Disclosure 15.2 - General business risk; Financial Disclosures Values representative of the 2016 Annual Audited Financial Statements. Values will publication of the 2017 Annual Audited Financial Statements. Values will publication of the 2017 Annual Audited Financial Statements (Q4 2017). 15.2.1 Total Revenue 15.2.2 Total Spenditure 15.2.3 Profits USD SMM 21.2 379 USD SMM 185 302 USD SMM 27 77 USD SMM 23.578 7.381 15.2.5 Total Liabilities USD SMM 23.348 6.983 152.6 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	14.1.3	Total Client Positions held in legally segregated but operationally comingled (LSOC) accounts			n/a	n/a	n/a	
15.1.1 Value of liquid net assets funded by equity Annual Audited Financial Statements (Q4 2017).	14.1.4	Total Client Positions held in comingled house and client accounts		Percentage	100%	100%	100%	
Disclosure 15.2 - General business risk; Financial Disclosures Values representative of the 2016 Annual Audited Financial Statements. Values will publication of the 2017 Annual Audited Financial Statements (QA 2017). 15.2.1 Total Revenue 15.2.2 Total Expenditure 15.2.3 Profits 15.2.4 Total Assets 15.2.4 Total Assets 15.2.5 Total Liabilities 15.2.6 Explain if collateral posted by clearing participants is held on or off the CCP's balance sheet 15.2.6 Explain if collateral posted by clearing participants is held on or off the CCP's balance sheet 15.2.7 Collateral is held on Balance Sheet 15.2.8 Collateral is held on Balance Sheet	Disclosu	re 15.1 - General business risk						Values representative of the 2016 Annual Audited Financial Statements. Values will remain static until publication of the 2017 Annual Audited Financial Statements (Q4 2017).
Disclosure 15.2 - General business risk; Financial Disclosures Values representative of the 2016 Annual Audited Financial Statements. Values will publication of the 2017 Annual Audited Financial Statements (Q4 2017). 15.2.1 Total Revenue Annual USD \$MM 212 379 USD \$MM 185 302 USD \$MM 27 77 15.2.4 Total Assets USD \$MM 23,578 7,381 15.2.5 Total Liabilities USD \$MM 23,348 6,983 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	15.1.1	Value of liquid net assets funded by equity	Annual	USD \$MM		210	314	
Section Publication of the 2017 Annual Audited Financial Statements (Q4 2017).	15.1.2	Six months of current operating expenses		USD \$MM		86	139	
15.2.2 Total Expenditure USD \$MM	Disclosu	re 15.2 - General business risk; Financial Disclosures						Values representative of the 2016 Annual Audited Financial Statements. Values will remain static until publication of the 2017 Annual Audited Financial Statements (Q4 2017).
15.2.3 Profits USD \$MM 27 77 15.2.4 Total Assets USD \$MM 23,578 7,381 USD \$MM 23,348 6,983 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 On Balance Sheet	15.2.1	Total Revenue	Annual	USD \$MM		212	379	
15.2.4 Total Assets USD \$MM 23,578 7,381 15.2.5 Total Liabilities USD \$MM 23,348 6,983 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 on Balance Sheet	15.2.2	Total Expenditure		USD \$MM		185	302	
15.2.5 Total Liabilities USD \$MM 23,348 6,983 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 on Balance Sheet	15.2.3	Profits		USD \$MM		27		
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 On Balance Sheet	15.2.4	Total Assets		USD \$MM	2	23,578		
on Balance Sheet on Balance Sheet	15.2.5	Total Liabilities		USD \$MM	2	3,348	6,983	
15.2.7 Additional items as necessary USD SMM n/a n/a	15.2.6	Explain if collateral posted by clearing participants is held on or off the CCP's balance sheet						
	15.2.7	Additional items as necessary		USD \$MM		n/a	n/a	

CPIVII-I	OSCO Quantitative Disclosures - DTCC						Q4 2016 (As of December 31, 2016)																	
Disclosure Reference	Disclosure Description	Frequency	Data Type	GSD I	ICC MBSD	NSCC	Explanatory Notes																	
Disclosu	re 15.3 - General business risk; Income breakdown						Values representative of the 2016 Annual Audited Financial Statements. Values will remain static until publication of the 2017 Annual Audited Financial Statements (Q4 2017).																	
15.3.1	Percentage of total income that comes from fees related to provision of clearing services	Annual	Percentage	100%		100%																		
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 o	r invested, split	by whether it w	as received as initi	ial margin or defa	ault 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	6,002	3,683	4,158	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%	99%	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		Percentage	55%	56%	55%																		
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%	5%	6%																		
16.2.5	Percentage of total participant cash held as cash deposits (including through reverse repo); as cash deposits at commercial banks (Unsecured)		Percentage	13%	9%	21%																		
16.2.6	Percentage of total participant cash held as cash deposits (including through reverse repo); in money market funds																			Percentage	26%	30%	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%	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						I					i	I			I		Bus. Days	1	1	1			
16.2.10	Percentage of total participant cash invested in securities; Domestic sovereign government bonds		Percentage	0%	100%	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%	100%	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	145	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																		

isclosure	Disclosure Description			D. L	FI	сс	NOGO	Forder to a Note:
eference	Disclosure Description		Frequency	Data Type	GSD	MBSD	NSCC	Explanatory Notes
Disclosu	re 16.2 - How total cash received from participants (16.1) is held/deposited/in	vested, including; (cont'	d)					
			Quarterly/					
16.2.18	State if the CCP investment policy sets a limit on the proportion of the investment portfolio that counterparty, and the size of that limit.	e if the CCP investment policy sets a limit on the proportion of the investment portfolio that may be allocated to a single nterparty, 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	
Disales:	46.2 Palamatha at language and the control of the c							
Disciosu	re 16.3 - Rehypothecation of participant assets (ie non-cash)							
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.
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;	ON_1D		USD \$MM	0	0	0	
10.5.5	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	
		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 outs	ourced) over spe	cified period for	the system			
17.1.1	Operational availability target for the core system(s) involved in clearing (whether or not outsout	rced) 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
	for the system							averaged across all of the systems identified below, in accordance with the established calculation f the applicable SLA.
Disclosu	re 17.2 - Actual availability of the core system(s) over the previous twelve mo	nth period		•	•			
D 1301030	the 1712 Account availability of the core system(s) over the previous there in	nun periou						
47.24	Actual availability of the core system(s) over the previous twelve month period		Quarterly	Percentage		99.8%		Availability is calculated across multiple systems. Specifically, CMU, CNS, Risk Management, GSD, M
17.2.1				_				and Trade Capture. Since Risk Management is across FICC and NSCC, actual availability cannot be
17.2.1								
17.2.1								captured at the individual entity level. Actual availability is across all three in total.
	ura 17.2 - Total number of failures							
	ure 17.3 - Total number of failures							
		previous twelve month	Quarterly	Count /		4 / 07:18:00		captured at the individual entity level. Actual availability is across all three in total.
Disclosu		previous twelve month	Quarterly	Count / hh:mm:ss		4 / 07:18:00		captured at the individual entity level. Actual availability is across all three in total.
Disclosu	Total number of failures and duration affecting the core system(s) involved in clearing over the	previous twelve month	Quarterly	-		4 / 07:18:00		captured at the individual entity level. Actual availability is across all three in total. Total number of failures and duration are for Reg SCI reportable failure incidents impacting the CCI
Disclosu	Total number of failures and duration affecting the core system(s) involved in clearing over the	previous twelve month	Quarterly	-		4 / 07:18:00		captured at the individual entity level. Actual availability is across all three in total. Total number of failures and duration are for Reg SCI reportable failure incidents impacting the CCF
Disclosu	Total number of failures and duration affecting the core system(s) involved in clearing over the period (Duration of Failure)	previous twelve month	Quarterly	-		4 / 07:18:00		captured at the individual entity level. Actual availability is across all three in total. Total number of failures and duration are for Reg SCI reportable failure incidents impacting the CCP
Disclosu	Total number of failures and duration affecting the core system(s) involved in clearing over the period (Duration of Failure) ure 17.4 - Recovery time objective(s)	previous twelve month	Quarterly Quarterly	-	Within 2 Hours	4 / 07:18:00 Within 2 Hours	Within 2 Hours	captured at the individual entity level. Actual availability is across all three in total. Total number of failures and duration are for Reg SCI reportable failure incidents impacting the Control of the Control of Sci

Disclosure	Disclosure Description				FICC			
Reference				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 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	1 Number of general clearing members		Quarterly/ Quarter End	Count	103	79	61	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	.2 Number of direct clearing members			Count	0	0	95	
18.1.1.3	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	32	14	12	
18.1.2.4	Number of other participants (Describe in comments)	ber of other participants (Describe in comments)		Count	71	65	144	
18.1.3.1	Number of domestic participants			Count	81	78	153	
18.1.3.1	Number of foreign participants			Count	22	1	3	US Branches/Agencies of Non US legal entities will be considered Non-US (foreign)
Disclosu	re 18.2 - Open Position Concentration		1					
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	
	of open positions held by the largest five clearing members, including both house and client, in aggregate	Peak End of Day		Percentage	n/a	n/a	n/a	
18.2.2	For each clearing service with 25 or more members; Percentage of open positions held by the	Average End of Day		Percentage	26%	41%	28%	
	largest five clearing members, including both house and client, in aggregate	Peak End of Day		Percentage	29%	45%	35%	
18.2.3	For each clearing service with 25 or more members; Percentage of open positions held by the	Average End of Day		Percentage	44%	64%	45%	
	largest ten clearing members, including both house and client, in aggregate	Peak End of Day		Percentage	48%	67%	55%	
Disclosu	re 18.3 - Initial Margin Concentration							
		Average End of Day	Quarterly	Percentage	n/a	n/a	n/a	Under NSCC's and each of FICC Division's current rules and structure, they do not maintain separate
18.3.1	For each clearing service with ten or more members, but fewer than 25 members; Percentage							Guaranty Funds. NSCC and each FICC Division collect Clearing Fund deposits from their Member a risk-based margin methodology. These amounts operate, individually, as the Member's margin
18.3.1	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		Percentage	n/a	n/a	n/a	a risk-based margin methodology. These amounts operate, individually, as the Member's margin, and
18.3.1	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		Percentage Percentage	n/a 36%	n/a 48%	n/a 29%	the aggregate of all such Members' deposits* is referred to, collectively, as the Clearing Fund, which
	of initial margin posted by the largest five clearing members, including both house and client, in aggregate	Peak End of Day						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.
	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		Percentage	36%	48%	29%	the aggregate of all such Members' deposits* is referred to, collectively, as the Clearing Fund, which

Disclosure Reference	Disclosure Description	Frequency	Data Type		FICC	NSCC	Explanatory Notes
				GSD	MBSD		
Disclosu	re 18.4 - Segregated Default Fund Concentration						
18.4.1	For each segregated default fund with ten or more members, but fewer than 25 members; Percentage of participant contributions to the default fund contributed by largest five clearing members in aggregate	Quarterly/ Quarter End	Percentage	n/a	n/a	n/a	See Explanatory Note from 18.3
18.4.2	For each segregated default fund with 25 or more members; Percentage of participant contributions to the default fund contributed by largest five clearing members in aggregate		Percentage	n/a	n/a	n/a	
18.4.3	For each segregated default fund with 25 or more members; Percentage of participant contributions to the default fund contributed by largest ten clearing members in aggregate		Percentage	n/a	n/a	n/a	
Disclosu	re 19.1 - Tiered participation arrangements, measures of concentration of client clearing						
19.1.1	Number of clients (if known)	Quarterly/ Quarter End	Count	n/a	n/a	n/a	See Explanatory Note from 14.1
19.1.2	Number of direct members that clear for clients		Count	n/a	n/a	61	NSCC: Number denotes members that clear for other Broker/Dealers.
19.1.3	Percent of client transactions 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
19.1.4	Percent of client transactions 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
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 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.
Disclosu	re 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 of the linked CCP on contracts cleared across link	Quarterly/ Quarter End	USD \$MM	n/a	n/a	n/a	See Explanatory Note from 20.1
Disclosu	re 20.3 - FMI Links, Initial Margin or equivalent financial resources collected						
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

Disclosure						FICC		
Reference	Disclosure Description		Frequency	Data Type	GSD	MBSD	NSCC	Explanatory Notes
Disclosu	re 20.4 - FMI Links, Results of Back-testing coverage				C 55	WESE		
2.00.000								
20.4.1	Number of times over the past twelve months that coverage provided by margin and equivaler	t financial resources held	Quarterly	Count	n/a	n/a	n/a	See Explanatory Note from 20.1
	against each linked CCP fell below the actual marked-to-market exposure to that linked CCP – b	ased on daily back testing						
	results; Intraday or Continuous or Once-a-day							
20.4.2	Number of observations (i.e. number of accounts multiplied by number of days covered in the	oack test); Intraday or		Count	n/a	n/a	n/a	
20.42	Continuous or Once-a-day				,	,	,	
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	, ,, ,	•	Quarterly/	USD \$MM	n/a	n/a	n/a	See Explanatory Note from 20.1
	linked CCP, that are available to the linked CCP to cover exposures to the CCP and whether par from the standard default fund	t of, additional to, or separate	Quarter End					
	from the standard default fund							
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	resources provided to each	Quarterly/	USD \$MM	n/a	n/a	n/a	See Explanatory Note from 20.1
	linked CCP, that are available to the linked CCP to cover exposures to the CCP and whether par	t of, additional to, or separate	Quarter End					
	from the standard default fund							
Disclosu	re 20.7 - FMI Links, Cross Margining							
Disclose	TO 2017 THE LINES, CLOSS WAIGHING							
20.7.1	Value of trades subject to cross margining, by clearing service, as a percentage of total trade va	lues/total notional values	Quarterly/	Percentage	19%	n/a	n/a	NSCC does not maintain any cross margining arrangements. NSCC does maintain an arrangement with
	cleared		Quarter End					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 total initial margin that		Percentage	1%	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.
	would otherwise have been held.							Exchange. For O3D under section 20.7, disclosures are quarterly averages.
Disclosu	re 23.1 - Disclosure of rules, key procedures, and market data; Average Daily	Volumes						
Disclusi	The 2012 Disclosure of fules, key procedures, and market data, Average Daily	Tolullies						
23.1.1	Average Daily Volumes by Asset Class, CCY and OTC/ETD	ОТС	Quarterly		164,563	15,571	31,366,723	For GSD/MBSD and NSCC, average daily volume data is based on sides (as opposed to trades).
		NSCC_Exchange	•		-	-	77,378,820	For NSCC: OTC: Includes OMGEO, NASDAQTRF, MUNI BONDS, FINRA ORF, ETF CR/RD, ECN/QSR, and
							, ,	CORP/UIT Bonds For NSCC: Exchange: Includes OCC, NYSE ARCA, NYSE AMEX, NYSE2, NYSE, NASDAQ PHLX, NASDAQ BX,
23.1.2	Notional Value of trades cleared by Asset Class, CCY and OTC/ETD	ОТС		USD \$MM	3,137,369	313,789	478,732	NASDAQ, DIRECT EDGE X, DIRECT EDGE A, CHX, BATS BYX and BATS
		NSCC_Exchange		USD \$MM	-	-	406,326	
Disala	22.2. Disalescons of mules have massed and a substitute by the substitute by					•		
Disclosu	ire 23.2 - Disclosure of rules, key procedures, and market data; Non-Yet-Settle	a						
22.2.4	Gross notional outstanding/total settlement value of novated but not-yet settled securities	CDS OTC	Quarterly/	USD \$MM	890.000	304,000	168,000	Sources: FICC and NSCC financial statements, as available in the DTCC public website
23.2.1	transactions by Asset Class, CCY and OTC/ETD	CDS_OTC	Quarterly/ Quarter End	ואוואול חכט	050,000	304,000	100,000	Sources. Tree and Noce infancial statements, as available in the DTCC public website
				l	l .	1	l	1

Disclosure							FICC		
Reference	Disclosure Desc	ription		Frequency	Data Type	GSD	MBSD	NSCC	Explanatory Notes
	I ure 23.3 - Disclosure of rules, key procedures, and mark	et data: Execution Facil	lity			C3 D	Wibsb		
	ncy: Quarterly		,						
23.3.1	Average daily volumes submitted by Execution facility or matching	/confirmation venue		Quarterly	Τ	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 matchi	ng/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
	,	0,							DIRECT EDGE X, DIRECT EDGE A, CHX, BATS BYX and BATS
Paymer	nt Risk Committee Disclosure 1 - Concentration Measure	es							
	Initial Margin Required		Top 3 Members	Quarterly/	USD \$MM	3,347	2,966	773	
	Number of Members with x% of Initial Margin Requirement		> 20%	Quarter End	Count	0	1	0	
			15% to 20%		Count	0	0	0	
			10% to 15%		Count	2	1	0	
			5% to 10%		Count	0	5	3	
							102		
	7.11.21.12.12.12.12.12.12.12.12.12.12.12.		< 5%		Count	113		153	
	Total Initial Margin Posted (Market Value)		Total		USD \$MM	15,678	7,293	4,389	
Paymer	nt Risk Committee Disclosure 2 - Intial Margin Detail								
	Initial Margin Breakdown by Component	VaR / Vola	itility	Quarterly/	USD \$MM	9,176	3,207	2,761	The Value-at-Risk (VaR) and Volatililty components are based on the potential price fluctuations of
				Quarter End					unsettled positions.
		Coverage	Component (CC)		USD \$MM	1,253	481	n/a	The Coverage Component is a back-test-like component that is meant to address potential model deficiencies.
		Implied Vo	Implied Vol Charge		USD \$MM	1,376	n/a	n/a	The Implied Vol Charge (also known as the Augmented Volatility Multiplier, or AVM) is designed to
		implied voi charge	or charge		O3D ŞIVIIVI	1,376	11/4	11/4	enhance the performance of the model and enable GSD to more effectively achieve and maintain the
									confidence level targeted by GSD.
		CME Cross	Margin		USD \$MM	-80	n/a	n/a	GSD has a cross-margining arrangement with the Chicago Mercantile Exchange. The amount represe
									the aggregate margin savings for common members who elect to participate in the cross-margining arrangement.
		Margin Re	eq. Differential (MRD)		USD \$MM	n/a	873	n/a	The MRD is designed to address position-variability risk by estimating the shortfall of end-of-day VaR
		margin ne	q. z.merenda (m.z.)		000 \$111111	, ,			and mark-to-market compared with the next day's intraday risk and the risk that the next margin call
									will not be satisfied.
		Market to	Market (MTM)		USD \$MM	n/a	0	281	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.
		Illiquid			USD \$MM	n/a	n/a	48	NSCC may apply an additional charge on positions in OTC Bulletin Board or Pink Sheet securities base on size, average daily volume or price; and financial condition of the participant. This charge is separate or size of the participant of the participant.
									from both VaR and SPC.
		SPC Charg	e		USD \$MM	n/a	n/a	106	NSCC applies the Shortened Process Cycle charge based on the amount of positions processed as not
									standard settling trades. Since these trades are guaranteed before margin is collected, the SPC charge
		Special Ch	arge		USD \$MM	532	1,376	26	covers the additional exposure. Special charges include MBSD's Margin Proxy charge and GSD's backtest charges. The MBSD Margin
		Special Cit	ui be		الااالالا حوق	332	1,370	20	Proxy charge was developed in October 2013 as an interim solution to immediately address the
									observed risk margin gaps between MBSD production VaR model and the targeted risk coverage leve
		Other Cha			USD \$MM	175	639	356	