



Q3 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	сс		
Reference	Disclosure Description		Frequency	Data Type	GSD	MBSD	NSCC	Explanatory Notes
Disclosu	re 4.1 - Total value of default resources (excluding initial and retained	variation margin), split by cleari	ng service if defau	It funds are segr	egated by clearin	ng service		
4.1.1	Prefunded - Own Capital Before		Quarterly/ Quarter End	USD \$MM	34	1.2	79.0	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	9,939	5,835	4,723	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			MM\$ D2U	12,671	6,524	5,516	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 (o	r round of participant defaults)		USD \$MM	n/a	n/a	n/a	
4.1.8	Committed - Aggregate participant commitments to address an initial participant defa defaults)	ult (or initial round of participant		USD \$MM	n/a	n/a	n/a	
4.1.9	Committed - Aggregate participant commitments to replenish the default fund to deal (or round of participant defaults) after the initial participant default (or round of participant default)			USD \$MM	n/a	n/a	n/a	
4.1.10	Committed - Other			USD \$MM	n/a	n/a	n/a	
	ire 4.2 - Kccp - Quarter End							
4.2.1	Kccp - Kccp need only be reported by those CCPs which are, or seek to be a "qualifying	CCP" under relevant law.	Quarterly	USD \$MM	296	n/a	n/a	
Disclosu	re 4.3 - Value of pre-funded default resources (excluding initial and ret	ained 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	2,409	2,200	2,600	
	<u> </u>	Post Haircut	Quarterly/ Quarter End	USD \$MM	2,409	2,200	2,600	
	Cash deposited at a central bank of issue of the currency concerned Cash deposited at other central banks	Post Haircut Pre Haircut	, ,	USD \$MM USD \$MM	2,409	2,200	2,600 0	
4.3.2	Cash deposited at other central banks	Post Haircut Pre Haircut Post Haircut	, ,	USD \$MM USD \$MM USD \$MM	2,409 0 0	2,200 0 0	2,600 0 0	
	<u> </u>	Post Haircut Pre Haircut Post Haircut Pre Haircut	, ,	USD \$MM USD \$MM USD \$MM USD \$MM	2,409 0 0 435	2,200 0 0 250	2,600 0 0 500	
4.3.2	Cash deposited at other central banks Secured cash deposited at commercial banks (including reverse repo)	Post Haircut Pre Haircut Post Haircut Pre Haircut Post Haircut	, ,	USD \$MM USD \$MM USD \$MM USD \$MM USD \$MM	2,409 0 0 435 444	2,200 0 0 250 255	2,600 0 0 500 510	See Explanatory Note from 4.1
4.3.2	Cash deposited at other central banks	Post Haircut Pre Haircut Post Haircut Pre Haircut Post Haircut Pre Haircut	, ,	USD \$MM USD \$MM USD \$MM USD \$MM USD \$MM USD \$MM	2,409 0 0 435 444 1,031	2,200 0 0 250 255 320	2,600 0 0 500 510	See Explanatory Note from 4.1
4.3.2	Cash deposited at other central banks Secured cash deposited at commercial banks (including reverse repo) Unsecured cash deposited at commercial banks	Post Haircut Pre Haircut Post Haircut Pre Haircut Post Haircut Pre Haircut Pre Haircut Post Haircut	, ,	USD \$MM USD \$MM USD \$MM USD \$MM USD \$MM	2,409 0 0 435 444	2,200 0 0 250 255	2,600 0 0 500 510 870	See Explanatory Note from 4.1 See Explanatory Note from 4.1
4.3.2 4.3.3 4.3.4.1	Cash deposited at other central banks Secured cash deposited at commercial banks (including reverse repo)	Post Haircut Pre Haircut Post Haircut Pre Haircut Post Haircut Pre Haircut	, ,	USD \$MM	2,409 0 0 435 444 1,031 1,031	2,200 0 0 250 255 320 320	2,600 0 0 500 510	
4.3.2 4.3.3 4.3.4.1	Cash deposited at other central banks Secured cash deposited at commercial banks (including reverse repo) Unsecured cash deposited at commercial banks	Post Haircut Pre Haircut Post Haircut Pre Haircut Post Haircut Pre Haircut Post Haircut Post Haircut Post Haircut	, ,	USD \$MM	2,409 0 0 435 444 1,031 1,031	2,200 0 0 250 255 320 320 1,643	2,600 0 0 500 510 870 870 1,269	

sclosure	Disclosure Description		Frequency	Data Type	FI	СС	NSCC	Explanatory Notes
erence	Disclosure Description		rrequency	Data Type	GSD	MBSD	NSCC	
sclosu	re 4.3 - Value of pre-funded default resources (excluding initial and retained va	riation margin) held fo	r each clearing ser	vice - Cont'd				
4.3.5	Non-Cash Sovereign Government Bonds - Domestic	Pre Haircut	Quarterly/	USD \$MM	7,358	1,805	288	See Explanatory Note from 4.1
		Post Haircut	Quarter End	USD \$MM	7,093	1,715	278	
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	-Cash Agency Bonds	Pre Haircut		USD \$MM	1,007	438	0	See Explanatory Note from 4.1
		Post Haircut		USD \$MM	937	407	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	.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	
	re 4.4 - Credit Risk Disclosures							
4.4.1	State whether the CCP is subject to a minimum "Cover 1" or "Cover 2" requirement in relation to total pre-funded default resources.		Quarterly		Cover 1	Cover 1	Cover 1	
4.4.2	For each clearing service, state the number of business days within which the CCP assumes it will close out the default when calculating credit exposures that would potentially need to be covered by the default fund.			Bus. Days	3	3	3	This is our risk horizon for liquidation and hedging of market risk.
4.4.3	For each clearing service, the estimated largest aggregate stress loss (in excess of initial margin) that would be caused by the default of any single participant and its affiliates (including	Peak Day/ Previous 12 Months		USD \$MM	1,214	1,127	1,113	
	transactions cleared for indirect participants) in extreme but plausible market conditions. (Previous 12 Months)	Mean Avg/ Previous 12 Months		USD \$MM	1,055	541	278	
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	

USD \$MM

USD \$MM

USD \$MM

USD \$MM

Bus. Days

19

2,019

1,837

0

3

1,531

797

0

Peak Day/

Peak Day/

Mean Avg/

Avg/

Previous 12 Months

Previous 12 Months

Previous 12 Months

Previous 12 Months

36

3

1,377

405

0

Amount represents Peak/Average VaR model back test results.

4.4.6

4.4.8

participants) (Previous 12 Months)

conditions (Previous 12 Months)

For each clearing service, the actual largest aggregate credit exposure (in excess of initial

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

(including transactions cleared for indirect participants) in extreme but plausible market

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.

margin) to any single participant and its affiliates (including transactions cleared for indirect

CI IVII-						ICC		
Disclosure Reference	Disclosure Description		Frequency	Data Type	GSD	ICC MBSD	NSCC	Explanatory Notes
	re 4.4 - Credit Risk Disclosures - Cont'd				GSD	IVIDSD		
Disclose	Te 4.4 - Cledit Nisk Disclosures - Cont u							
4.4.9	The amount in 4.4.7 which exceeded actual pre-funded default resources (in excess of initial	Amt Exceeded/	Quarterly	USD \$MM	0	0	0	
	margin) (Previous 12 Months)	Previous 12 Months						
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	168	6	51	Amount represents Peak/Average VaR model back test results.
	indirect participants)? (Previous 12 Months)	Avg/		USD \$MM	28	3	4	
		Previous 12 Months						
Disclosu	re 5.1 - Assets eligible as initial margin, and the respective haircuts applied							
5.1.1	Assets eligible as initial margin and the respective haircuts applied		Update as changes are made	Website/ Hyperlink			http://www.dtcc.	
			are made	Пуреник	com/~/media/Fil		es/Downloads/le	
							gal/rules/nscc_ru	
					v_rules.pdf	sd_rules.pdf	les.pdf	
					Section:	Section:	Section:	
					"SCHEDULE OF	"SCHEDULE OF	"PROCEDURE	
					HAIRCUTS FOR	HAIRCUTS FOR	XV", "III.	
					ELIGIBLE CLEARING FUND	ELIGIBLE CLEARING FUND	Collateral Value of Eligible	
					SECURITIES"	SECURITIES"	Clearing Fund	
					SECONTILS	SECOMITIES	clearing runu	
Ì							Securities"	
							Securities"	
Disclosu	re 5.2 - Assets Eligible for pre-funded participant contributions to the default	resources, and the resp	ective haircuts appli	ied (if differen	t from 5.1)		Securities"	
				ied (if differen		See 5.1 above		
Disclosu			ective haircuts appli Update as changes are made	ied (if differen	t from 5.1) See 5.1 above	See 5.1 above	Securities" See 5.1 above	
	Assets Eligible for pre-funded participant contributions to the default resources, and the respect		Update as changes	ied (if differen		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	ied (if differen		See 5.1 above		
5.2.1	Assets Eligible for pre-funded participant contributions to the default resources, and the respect		Update as changes	ied (if differen		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	ied (if differen		See 5.1 above		
5.2.1 Disclosu	Assets Eligible for pre-funded participant contributions to the default resources, and the respect different from 5.1) Tre 5.3 - Results of testing of haircuts		Update as changes are made		See 5.1 above		See 5.1 above	
5.2.1 Disclosu	Assets Eligible for pre-funded participant contributions to the default resources, and the respect different from 5.1) Tre 5.3 - Results of testing of haircuts		Update as changes are made		See 5.1 above		See 5.1 above	See Explanatory Note from 4.4.2
5.2.1 Disclosu 5.3.1	Assets Eligible for pre-funded participant contributions to the default resources, and the respect different from 5.1) Tre 5.3 - Results of testing of haircuts Confidence interval targeted through the calculation of haircuts		Update as changes are made	Percentage	See 5.1 above	99%	See 5.1 above	See Explanatory Note from 4.4.2
5.2.1 Disclosu 5.3.1	Assets Eligible for pre-funded participant contributions to the default resources, and the respect different from 5.1) Tre 5.3 - Results of testing of haircuts Confidence interval targeted through the calculation of haircuts		Update as changes are made	Percentage	See 5.1 above	99%	See 5.1 above	See Explanatory Note from 4.4.2
5.2.1 Disclosu 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) Ire 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	tive haircuts applied (if	Update as changes are made	Percentage Bus. Days	99% 3 Days 10 years	99% 3 Days 10 years	99% 3 Days 10 years	
5.2.1 Disclosu 5.3.1	Assets Eligible for pre-funded participant contributions to the default resources, and the respect different from 5.1) Ire 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	Update as changes are made	Percentage Bus. Days Bus. Days	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 observed
5.2.1 Disclosu 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) Ire 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	99% 3 Days 10 years 11 0	99% 3 Days 10 years n/a 0	99% 3 Days 10 years n/a n/a	
5.2.1 Disclosu 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) Ire 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	Update as changes are made	Percentage Bus. Days Bus. Days	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 observed where a change in rate caused a breach in respective HC. The total day count for Treasuries is 11 (as 1
5.2.1 Disclosu 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) Ire 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	99% 3 Days 10 years 11 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 observed where a change in rate caused a breach in respective HC. The total day count for Treasuries is 11 (as 1 day caused the breach in both tenors, 20 & 30 yr.). For Agencies and Mortgages no breaches were
5.2.1 Disclosu 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) Tre 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	99% 3 Days 10 years 11 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 observed where a change in rate caused a breach in respective HC. The total day count for Treasuries is 11 (as 1 day caused the breach in both tenors, 20 & 30 yr.). For Agencies and Mortgages no breaches were observed under current HCs
5.2.1 Disclosu 5.3.1 5.3.2 5.3.3 Disclosu	Assets Eligible for pre-funded participant contributions to the default resources, and the respect different from 5.1) Tre 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 11 0 0	99% 3 Days 10 years n/a 0 0	99% 3 Days 10 years n/a n/a n/a 4,723	For Treasuries based on a 10 yr. look-back, 1 day for 20 yr. and 11 days for 30 yr. tenors were observed where a change in rate caused a breach in respective HC. The total day count for Treasuries is 11 (as 1 day caused the breach in both tenors, 20 & 30 yr.). For Agencies and Mortgages no breaches were
5.2.1 Disclosu 5.3.1 5.3.2 5.3.3 Disclosu	Assets Eligible for pre-funded participant contributions to the default resources, and the respect different from 5.1) Tre 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 USD \$MM	99% 3 Days 10 years 11 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 observed where a change in rate caused a breach in respective HC. The total day count for Treasuries is 11 (as 1 day caused the breach in both tenors, 20 & 30 yr.). For Agencies and Mortgages no breaches were observed under current HCs

Q3 2016 (As of September 30, 2016)

Disclosure	Disclosure Description		Frequency	Data Type	F	сс	NSCC	Explanatory Notes
Reference					GSD	MBSD	Nace	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)				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.
6.2.1	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	
		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	
6.2.2	Cash deposited at other central 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	
6.2.3	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 n/a	n/a	
		Client IM Post Haircut		USD \$MM USD \$MM	n/a	n/a n/a	n/a	
		Total IM Pre Haircut Total IM Post Haircut		USD \$MM	n/a	n/a 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	
0.2.4	onsecured cash deposited at commercial banks	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	
0.2.3	Non-cash sovereigh dovernment bonds - boniestic	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	
6.2.6	Non-Cash Sovereign Government Bonds - 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	
6.2.7	Non-Cash Agency 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	

Disclosure	Plada was Paradatina		F			FICC		
Reference	Disclosure Description		Frequency	Data Type	GSD	MBSD	NSCC	Explanatory Notes
Disclosu	re 6.2 - For each clearing service, total initial margin required, sp	lit by house and client (or combined t	otal if not segrega	ated) (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	

	•					100		
Disclosure Reference	Disclosure Description		Frequency	Data Type		ICC	NSCC	Explanatory Notes
	we 6.3. For each cleaning coming total initial records against suit his house	ad aliant (av sambir ad	otal if not seement	tod) (comtid)	GSD	MBSD		
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.
6.2.15	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	
Disclosu	re 6.3 - Initial Margin rates on individual contracts, where the CCP sets such ra	tes						
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	
Disclosu	re 6.4 - Type of initial margin model used (e.g. portfolio simulation or risk aggr	agation) for each cleari	ng carvice and the	kov model dosi	n parameters fo	r each initial mare	in model applied	I to that clearing service
Disclusu	ile 6.4 - Type of filitial filatgin filodel used (e.g. portiono silitulation of fisk aggr	egation) for each clean	ing service and the	key moder desig	511 parameters 10	- cacii iiilliai iilal	, iii iiiodei appliet	to that ticaling scivice
6.4.4	Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing	service and the key model	Update as changes		Historical	Historical	Parametric	
	design parameters for each initial margin model applied to that clearing service		are made		Simulation +	Simulation +	VaR + Haircut	
					Haircut	Haircut		
Disclosu	re 6.5 - Results of back-testing of initial margin. At a minimum, this should incl	ude for each clearings	ervice and each ini	tial margin mod	lel annlied to tha	t clearing service		
Disclosu	ire 0.5 - Results of Back-testing of Initial Hargin. At a Hillimitally, this should hid	ude, for each clearing s	ervice and each ini	tiai maigiii moc	iei applieu to tila	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	152	37	41	
	fell below the actual marked-to-market exposure of that member account – based on daily back-testing results	Previous 12 Months						
	back testing results							
6.5.2	Number of observations ([Number of accounts * number of days])	Previous 12 Months		Count	26,576	29,750	33,141	
6.5.3	Achieved coverage level [aggregate CCP-level backtest coverage]	Previous 12 Months		Percentage	99.4%	99.8%	99.9%	
6.5.4	Where breaches of initial margin coverage (as defined in 6.5(a)) have occurred, report on size	Peak Size/		USD \$MM	184	14	5	
	of uncovered exposure	Previous 12 Months						
6.5.5	Where breaches of initial margin coverage (as defined in 6.5(a)) have occurred, report on size	Average Size/		USD \$MM	14	1	1	
	of uncovered exposure	Previous 12 Months						
Disclosu	re 6.6 - Average Total Variation Margin Paid to the CCP by participants each bu	sinoss						
Disclosu	ile 6.6 - Average Total Variation Margin Paid to the CCP by participants each bu	15111655						
6.6.1	Average Total Variation Margin Paid to the CCP by participants each business day	Average	Quarterly	USD \$MM	1,301	697	229	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.
Disclosu	re 6.7 - Maximum total variation margin paid to the CCP on any given business	day over the period						
Disclosu	in the state of th	ady 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	2,313	2,406	917	See Explanatory Note from 6.6
					!	+	·	

CPIVII-	IOSCO Quantitative Disclosures - DTCC							Q3 2016 (As of September 30, 2016)
Disclosure	Disclosure Description		Frequency	Data Type		icc	NSCC	Explanatory Notes
Reference	ura 6.9. Maximum aggregate initial margin call on any given business day over	the period		<u>"</u>	GSD	MBSD		· · ·
Disclose	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	1,397	625	1,237	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	ure 7.1 - Liquidity Risk							
7.1.1	State whether the clearing service maintains sufficient liquid resources to 'Cover 1' or 'Cover 2'.	State whether the clearing service maintains sufficient liquid resources to 'Cover 1' or 'Cover 2'.			Cover 1	Cover 1	Cover 1	
7.1.2	Size and composition of qualifying liquid resources for each clearing service; (a) Cash deposited the currency concerned	at a central bank of issue of	Quarter End	USD \$MM	2,409	2,200	5,124	
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	435	250	500	
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	1,031	320	870	
		Money Market Funds		USD \$MM	900	1,643	1,269	
		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 committed repos			USD \$MM	n/a	20,206	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)	mitted lines of credit (ie which		USD \$MM	n/a	n/a	n/a	
7.1.8	Size and composition of qualifying liquid resources for each clearing service; (g) highly marketat and investments that are readily available and convertible into cash with prearranged and highly arrangements even in extreme but plausible market conditions			USD \$MM	8,365	1,943	288	Amounts include Clearing Fund securities.
7.1.9				USD \$MM	45,744	1,373	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. September 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 9/30 there were no SLD deposits on hand) Resources reported in Section 7.1 are as of 9/30/16 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, an procedure, and governance arrangement around such decision making.	d any applicable rule, policy,			n/a	n/a	n/a	

Disclosure	Disslatura Description	Eroguandu	Data Tura	F	ICC	NSCC	Fuel and any Mater
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 ab	ove those qualifying	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 loans from clearing banks as additional liquidity resources.	as additional	NSCC can use collateralized loans/equity repo utilizing the cash market securities that were destined to defaulter as collateral.	
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	59,248	13,013	15,877	For GSD and MBSD, values are estimated liquidity obligations 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 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 available at the point the breach occurred), and by how much.	Quarterly	Bus. Days USD \$MM	0	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	15,276	8,572	GSD/MBSD/NSCC did not utilize any of its liquidity resources to cover any member payment obligations NSCC reflects multi-day settlement obligations. GSD obligations that are based on trades that are due to settle the following business day. MBSD obligations are based on bilateral trades due to settle the next business day.
7.3.4	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	59,248	13,013	15,877	See Explanatory Note from 7.3.1
7.3.5	Number of business days, if any, on which the above amounts exceeded its qualifying liquid resources in each relevant currency (as identified in 7.1 and available at the point the breach occurred), and by how much	Quarterly	Bus. Days USD \$MM	0	0	0	See Explanatory Note from 7.1.9 reference for SLD
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.
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	
Disclosu	re 12.2 - Percentage of settlements by volume effected using a DvP, DvD or PvP settlement mechanism	1					
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	

	OSCO Quantitative Disclosures - DTCC						Q3 2010 (A3 01 30 ptc mbc1 30, 2010
Disclosure Reference	Disclosure Description	Frequency	Data Type	GSD	FICC MBSD	NSCC	Explanatory Notes
Disclosur	e 13.1 - Quantitative information related to defaults			332			
13.1.1	Quantitative information related to defaults; Amount of loss versus amount of initial margin	Ad-hoc		n/a	n/a	n/a	
13.1.2	Quantitative information related to defaults; Amount of other financial resources used to cover losses			n/a	n/a	n/a	
13.1.3	Quantitative information related to defaults; Proportion of client positions closed-out/ported			n/a	n/a	n/a	
13.1.4	Quantitative information related to defaults; Appropriate references to other published material related to the defaults			n/a	n/a	n/a	
Disclosur	e 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%	
Disclosur	e 15.1 - General business risk						Values representative of the 2015 Annual Audited Financial Statements. Values will remain static until publication of the 2016 Annual Audited Financial Statements (Q4 2016).
15.1.1	Value of liquid net assets funded by equity	Annual	USD \$MM		214	321	
15.1.2	Six months of current operating expenses		USD \$MM		77	144	
Disclosur	e 15.2 - General business risk; Financial Disclosures						Values representative of the 2015 Annual Audited Financial Statements. Values will remain static until publication of the 2016 Annual Audited Financial Statements (Q4 2016).
15.2.1	Total Revenue	Annual	USD \$MM		171	368	
15.2.2	Total Expenditure		USD \$MM		170	311	
15.2.3	Profits		USD \$MM		1	33	
15.2.4	Total Assets		USD \$MM	1	15,795		
15.2.5	Total Liabilities		USD \$MM	1	5,580	5,277	
15.2.6	Explain if collateral posted by clearing participants is held on or off the CCP's balance sheet				eral is held ance Sheet	Collateral is held on Balance Sheet	
15.2.7	Additional items as necessary		USD \$MM		n/a	n/a	

CPIVII-I	OSCO Quantitative Disclosures - DTCC						Q3 2016 (As of September 30, 2016)					
Disclosure	Disclosure Description	Fraguancy	Data Tuna	ļ	icc	NSCC	Explanatory Notes					
Reference		Frequency	Data Type	GSD	MBSD	NSCC	Explanatory Notes					
Disclosu	Disclosure 15.3 - General business risk; Income breakdown Values representative of the 2015 Annual Audited Financial Statements. Values will remain static un publication of the 2016 Annual Audited Financial Statements (Q4 2016).											
15.3.1	Percentage of total income that comes from fees related to provision of clearing services	Annual	Percentage	100%		99.65%						
15.3.2	Percentage of total income that comes from the reinvestment (or rehypothecation) of assets provided by clearing participants		Percentage		/a	n/a						
Disclosu	Disclosure 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											
16.1.1	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	4,775	4,438	5,239	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	50%	50%	50%						
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	9%	6%	10%						
16.2.5	Percentage of total participant cash held as cash deposits (including through reverse repo); as cash deposits at commercial banks (Unsecured)		Percentage	22%	7%	16%						
16.2.6	Percentage of total participant cash held as cash deposits (including through reverse repo); in money market funds		Percentage	19%	37%	24%						
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%	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	237	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						

Disclosure					F	cc		
Reference	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'c	d)					
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.	may be allocated to a single	Quarterly/ Quarter End		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	
		I						
Disclosu	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.
			Quarter End					nen-ppotieccuson accuracy purposes only in the createst a delibration
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: Overnight/one day; one day and up to one week; One week and up to one month; One month	1D_1W		USD \$MM	0	0	0	
	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 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 USD \$MM	0	0	0	
10.5.4	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	
Disclosu	re 17.1 - Operational availability target for the core system(s) involved in clear	ing (whether or not outs	ourced) over spec	rified period for	the system			
Disclosa	To 17.12 Operational availability target for the core system(s) involved in clear	ing (whether or not outs	ourceu, over spec	cinea perioa ioi	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 for
								the applicable SLA.
Disclosu	re 17.2 - Actual availability of the core system(s) over the previous twelve mor	nth period						
17.2.1	Actual availability of the core system(s) over the previous twelve month period		Quarterly	Percentage		99.82%		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.
								taparea at the manifest chart, even retain a analysis are as an ance in total
Disclosu	re 17.3 - Total number of failures							
17.3.1	Total number of failures and duration affecting the core system(s) involved in clearing over the	previous twelve month	Quarterly	Count /		6 / 15:13:00		Total number of failures and duration are for Reg SCI reportable failure incidents impacting the CCP
17.3.1	period (Duration of Failure)	p. 1545 circure mondi	Qua. City	hh:mm:ss		5, 15.15.00		systems. Incidents that do not result in a direct business impact are not included.
					<u> </u>			
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.
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Disclosure	Disclosure Description			Data Euro	FI	сс	NISSS	
Reference	Disclosure Description		Frequency	Data Type	GSD	MBSD	NSCC	Explanatory Notes
Disclosu	re 18.1 - Number of clearing members, by clearing service							For GSD, there are Broker/Dealers, Government Sponsored Entities For MBSD, there are Broker/Dealers, Hedge Fund, Mortgage Companies, Government Sponsored Entities, Registered Investment Companies, etc. For NSCC there are Broker/Dealers, certain stock exchanges (for omnibus account reporting), and one CSD.
18.1.1.1	Number of general clearing members		Quarterly/ Quarter End	Count	106	78	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	96	
18.1.1.3	Number of others category (Describe in comments)			Count	0	0	0	Numbers do not include types of members that are not eligible for CCP services: GSD Comparison-Only members, MBSD Electronic Pool Notification (EPN)-only members, and NSCC has several limited membership categories that are not reported here.
18.1.2.1	Number of central bank participants			Count	0	0	0	
18.1.2.2	Number of CCP participants			Count	0	0	0	
18.1.2.3	Number of bank participants			Count	33	14	12	
18.1.2.4	Number of other participants (Describe in comments)			Count	73	64	147	
18.1.3.1	Number of domestic participants			Count	84	77	156	
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							
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	25%	43%	29%	
	largest five clearing members, including both house and client, in aggregate	Peak End of Day		Percentage	26%	46%	32%	
18.2.3	For each clearing service with 25 or more members; Percentage of open positions held by the	Average End of Day		Percentage	43%	63%	45%	
	largest ten clearing members, including both house and client, in aggregate	Peak End of Day		Percentage	45%	66%	55%	
Disclosu	re 18.3 - Initial Margin Concentration							
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	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 Guaranty Funds. NSCC and each FICC Division collect Clearing Fund deposits from their Members using
	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
18.3.2	For each clearing service with 25 or more members; Percentage of initial margin posted by the largest five clearing members, including both house and client, in aggregate	Average End of Day		Percentage	35%	44%	27%	the aggregate of all such Members' deposits* is referred to, collectively, as the Clearing Fund, wh operates as NSCC's and each of FICC Division's default fund.
		Peak End of Day		Percentage	37%	48%	26%	* Member's deposits include excess deposits exceeding the requirement that can be withdrawn by
18.3.3	For each clearing service with 25 or more members; Percentage of initial margin posted by the largest ten clearing members, including both house and client, in aggregate	Average End of Day		Percentage	52%	60%	46%	members.
	arbest ten clearing members, including both nouse and thent, in aggregate	Peak End of Day		Percentage	55%	65%	42%	

Disclosure	Disclosure Description		Data Type		ICC	NSCC	Explanatory Notes			
Reference				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	63	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.			
Disclosure 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					F	ICC		
eference	Disclosure Description		Frequency	Data Type	GSD	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 equivalen	nt 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 – l	based 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	back test); Intraday or		Count	n/a	n/a	n/a	
	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					
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 financia		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 part of, additional to, or separate							
	from the standard default fund							
Disalas	are 20.7 FBALLinks Cross Margining	·						
Disclosu	re 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 va	alues/total notional values	Quarterly/	Percentage	21%	n/a	n/a	NSCC does not maintain any cross margining arrangements. NSCC does maintain an arrangement wit
20.7.1	cleared	andes/ total flotional values	Quarter End	refeemage		1,74	1,74	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
201712	would otherwise have been held.	or total miliar margin that		. creemage	170	.,, 0	.,,	Exchange. For GSD under section 20.7, disclosures are quarterly averages.
Disclosu	re 23.1 - Disclosure of rules, key procedures, and market data; Average Daily	Volumes						
23.1.1	Average Daily Volumes by Asset Class, CCY and OTC/ETD	ОТС	Quarterly		147,513	14,697	30,373,348	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
		NSCC_Exchange			-	-	70,829,976	CORP/UIT Bonds
23.1.2	Notional Value of trades cleared by Asset Class, CCY and OTC/ETD	ОТС		USD \$MM	2,975,034	294,984	432,181	For NSCC: Exchange: Includes OCC, IEX, NYSE ARCA, NYSE AMEX, NYSE, NSX, NASDAQ PHLX, NASDAC
		NGCC Freehaman				,		BX, NASDAQ, DIRECT EDGE X, DIRECT EDGE A, CHX, BATS BYX and BATS
	NSCC_Exchange			USD \$MM	-	-	372,776	
Disclosu	re 23.2 - Disclosure of rules, key procedures, and market data; Non-Yet-Settle	ad .						
Discioso	ne 2012 Disclosure of fules, key procedures, and market data, non-fet-settie	-u						
23.2.1	Gross notional outstanding/total settlement value of novated but not-yet settled securities	CDS_OTC	Quarterly/	USD \$MM	871,000	389,000	231,000	Sources: FICC and NSCC financial statements, as available in the DTCC public website
23.2.1	transactions by Asset Class, CCY and OTC/ETD	CD3_01C	Quarter End	ואוואול חכט	871,000	369,000	231,000	Sources. The and resecting in the bree public website
	,		****					

Disclosure		Frequency			FICC				
Reference	Disclosure Description		Data Type	GSD	MBSD	NSCC	Explanatory Notes		
Disclos	ture 23.3 - Disclosure of rules, key procedures, and market data	: Execution Facil	itv				555	_	
	ncy: Quarterly		•,						
23.3.1	Average daily volumes submitted by Execution facility or matching/confirmation	ation 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/confir	mation 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
Payme	nt Risk Committee Disclosure 1 - Concentration Measures								
	Initial Margin Required		Top 3 Members	Quarterly/	USD \$MM	2,035	2,077	878	
	Number of Members with x% of Initial Margin Requirement		> 20%	Quarter End	Count	0	0	0	
			15% to 20%		Count	0	0	0	
			10% to 15%		Count	0	0	0	
			5% to 10%		Count	5	1	2	
			< 5%		Count	111	107	157	
	Total Initial Margin Posted (Market Value)		Total		USD \$MM	12,996	6,878	5,725	
	Total Illital Walgill Osted (Walket Value)		Total		OJD ŞIVIIVI	12,550	0,070	3,723	
Payme	nt Risk Committee Disclosure 2 - Intial Margin Detail								
	Initial Margin Breakdown by Component VaR / Vo		tility	Quarterly/ Quarter End	USD \$MM	7,414	2,935	3,939	The Value-at-Risk (VaR) and Volatililty components are based on the potential price fluctuations of unsettled positions.
		Coverage C	Component (CC)		USD \$MM	858	2	n/a	The Coverage Component is a back-test-like component that is meant to address potential model deficiencies.
		Implied Vo	l Charge		USD \$MM	1,112	n/a	n/a	The Implied Vol Charge (also known as the Augmented Volatility Multiplier, or AVM) is designed to 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	-102	n/a	n/a	GSD has a cross-margining arrangement with the Chicago Mercantile Exchange. The amount represents the aggregate margin savings for common members who elect to participate in the cross-margining arrangement.
		Margin Red	q. Differential (MRD)		USD \$MM	n/a	468	n/a	The MRD is designed to address position-variability risk by estimating the shortfall of end-of-day VaR 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	218	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.
	SPC Chai				USD \$MM	n/a	n/a	43	NSCC may apply an additional charge on positions in OTC Bulletin Board or Pink Sheet securities based on size, average daily volume or price; and financial condition of the participant. This charge is separate from both VaR and SPC.
			2		USD \$MM	n/a	n/a	154	NSCC applies the Shortened Process Cycle charge based on the amount of positions processed as non- standard settling trades. Since these trades are guaranteed before margin is collected, the SPC charge covers the additional exposure.
			arge		USD \$MM	466	2,423	29	Special charges include MBSD's Margin Proxy charge and GSD's backtest charges. The MBSD Margin 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 levels.
1		Other Char	ges		USD \$MM	191	8	338	