

Financial Market Infrastructure: Quantitative Disclosure

Principle 4 Credit Risk

(Unit : Millions of yen)

Ref.No.	Disclosure			Frequency		Clearing Service			Comments		
	Disclosure Description			Start Date	End Date	Interest Rate Futures Contracts	Exchange Forex Margin Contracts	Exchange Equity Index Margin			
4.1.1	Total value of default resources (excluding initial and retained variation margin) - Prefunded	Own Capital	Before		2016/12/30	2016/12/30	1,000	1,026	214		
4.1.2			Alongside				0	1,974	386		
4.1.3			After				0	0	0		
4.1.4		Participant contributions	Required				2,234	111	1,149		
4.1.5			Posted	Post-Haircut			6,886	16,977	1,098		
4.1.6		Other					0	0	0		
4.1.7	Total value of default resources (excluding initial and retained variation margin) - Committed	Own/parent funds	Round of participant defaults		2016/12/30	2016/12/30	0	0	0		
4.1.8		Participant commitments	Initial round of participant default				0	21,556	2,089		
4.1.9			Replenish the default fund				unlimited	unlimited	unlimited		
4.1.10		Other					0	0	0		
4.2.1	KCCP	BCBS 282			2016/12/30	2016/12/30	68	0	0		
4.3.1	Value of pre-funded default resources (excluding initial and retained variation margin)	Cash	Cash deposited at a central bank of issue of the currency concerned	Pre-Haircut	2016/12/30	2016/12/30	-	-	-	(4.3.3)"Secured cash deposited at commercial banks" refers to the cash deposited at ordinary deposit account or fixed deposit account in commercial bank, which does not incur any loss at the maturity.	
4.3.2				Post-Haircut			-	-	-		
4.3.3			Secured cash deposited at commercial banks	Pre-Haircut			3,043	14,419	1,557		
				Post-Haircut			3,043	14,419	1,557		
4.3.4			Unsecured cash deposited at commercial banks	Pre-Haircut			0	0	0		
				Post-Haircut			0	0	0		
4.3.5			Non-cash	Sovereign Government Bonds -	Pre-Haircut			2,220	5,495		0
4.3.6					Post-Haircut			2,189	5,434		0
4.3.7		Sovereign Government Bonds - Agency Bonds		Pre-Haircut			0	0	0		
				Post-Haircut			0	0	0		
4.3.8		State/municipal bonds		Pre-Haircut			0	0	0		
				Post-Haircut			0	0	0		
4.3.9		Corporate bonds		Pre-Haircut			0	0	0		
				Post-Haircut			0	0	0		
4.3.10		Equities		Pre-Haircut			3,792	177	201		
	Post-Haircut					2,654	123	141			
4.3.11	Commodities - Gold	Pre-Haircut			-	-	-				
		Post-Haircut			-	-	-				
4.3.12	Commodities - Other	Pre-Haircut			-	-	-				
		Post-Haircut			-	-	-				
4.3.13	Commodities - Mutual Funds/UCITs	Pre-Haircut			-	-	-				
		Post-Haircut			-	-	-				
4.3.14	Commodities - Other	Pre-Haircut			-	-	-				
		Post-Haircut			-	-	-				
4.3.15	In total	Pre-Haircut			9,055	20,090	1,758				
		Post-Haircut			7,886	19,977	1,698				

4.4.1	Credit Risk Disclosures	Whether the CCP is subject to a minimum "Cover1" or "Cover2" requirement in relation to total pre-funded default resources		2016/1/1	2016/12/30	4	3	2	(4.4.1)The number of expected defaulting members is defined as one Clearing Member that would potentially cause the largest risk to TFX and several Clearing Members with the lowest amount of net assets. Interest Rate Futures Contracts : 3members / Exchange Forex Margin Contracts : 2members / Exchange Equity Index Margin Contracts : 1member  (4.4.3~4.4.6, 4.4.7~4.4.10)The estimated largest aggregate stress loss (here in after "ELL") is calculated on the basis of the number of expected defaulting members TFX defines in 4.4.1  (4.4.4~4.4.5)With regard to Exchange Forex Margin Contracts and Exchange Equity Index Margin Contracts, TFX has adopted the Financial Resources Framework, where at least 60% of the ELL should be prepared by the actual prefunded default resources for the first year. 4.4.4 and 4.4.5 shows the number of business days, if any, on which the 60% of the ELL exceed the actual prefunded default resources and the exceeded amounts. TFX will raise the ratio of the prefunded default resources up to 100% within five years.	
4.4.2		The number of business days within which the CCP assumes it will close out default when calculating credit exposures that would potentially need to be covered by the default fund				1day	1day	1day		
4.4.3		The estimated largest aggregate stress loss (in excess of initial margin) that would be caused by the default of any single participant and its affiliates (including transactions cleared for indirect participants) in extreme but plausible market conditions		Peak day amount in previous 12 months			3,331	47,744		3,831
				Average over previous 12 months			2,162	14,531		1,374
4.4.4		The number of business days, if any, on which the above amount (4.4.3) exceeded actual pre-funded default resources		No. of days			0day	2days		0day
4.4.5		The amount in 4.4.3 which exceeded actual pre-funded default resources					-	5,502		-
							-	698		-
							-	-		-
							-	-		-
							-	-		-
	-						-	-		
	-						-	-		
	-						-	-		
	-						-	-		
	-						-	-		
4.4.6	The actual largest aggregate credit exposure to any single participant and its affiliates		Peak day amount in previous 12 months			388	19,032	496		
Average over previous 12 months					2	74	3			
4.4.7	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 conditions		Peak day amount in previous 12 months			-	-	-		
			Average over previous 12 months			-	-	-		
4.4.8	The number of business days, if any, on which the above amount (4.4.3) exceeded actual pre-funded default resources		No. of days			-	-	-		
4.4.9	The amount in 4.4.3 which exceeded actual pre-funded default resources		The top five amount			-	-	-		
						-	-	-		
						-	-	-		
						-	-	-		
4.4.10	The actual largest aggregate credit exposure to any two participants and their affiliates		Peak day amount in previous 12 months			-	-	-		
			Average over previous 12 months			-	-	-		

Principle 5 Collateral

Ref.No.	Disclosure Description		Frequency		Clearing Service			Comments
			Start Date	End Date	Interest Rate Futures Contracts	Exchange Forex Margin Contracts	Exchange Equity Index Margin	
5.1.1	Collateral	Assets eligible, and the respective haircuts applied	Initial margin	-	-	http://www.tfx.co.jp/en/rules/document/a1a09_en.pdf		
5.2.1		Pre-funded participant contributions to the default resources			http://www.tfx.co.jp/en/rules/document/a7a02_en.pdf			
5.3.1	Results of testing of haircuts	Confidence interval targeted through the calculation of haircut	Assumed holding/liquidation period for the assets accepted	2016/10/1	2016/12/30	100%	100%	100%
5.3.2						4days	4days	4days
5.3.3						1year	1year	1year
5.3.4						3day	0day	0day
		The 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						

Ref.No.	Disclosure			Frequency		Clearing Service			Comments
	Disclosure Description			Start Date	End Date	Interest Rate Futures Contracts	Exchange Forex Margin Contracts	Exchange Equity Index Margin	
6.1.1	Total initial margin required	Total initial margin required	House Net	2016/12/30	2016/12/30	710	6,350	1,074	(6.1.1)"Total initial margin required" of TFX_FX and TFX_CFD includes the amount of variation margin.
			Client Gross			-	61,315	2,383	
			Client Net			1,620	-	-	
			Total			2,329	67,664	3,457	
6.2.1	Total initial margin held - Cash	Cash deposited at a central bank issue of the currency concerned	House	Pre Haircut		-	-	-	(6.1.1~6.2.15)Initial margin deposit for TFX_FX and TFX_CFD is deposited only by JPY cash.
			House	Post Haircut		-	-	-	
			Client	Pre Haircut		-	-	-	
			Client	Post Haircut		-	-	-	
			Total	Pre Haircut		-	-	-	
			Total	Post Haircut		-	-	-	
6.2.2		Cash deposited at other central banks	House	Pre Haircut		-	-	-	(6.2.3)"Secured cash deposited at commercial bank" refers to the cash deposited at ordinary deposit account or fixed deposit account in commercial bank, and it does not incur any loss at the maturity.
			House	Post Haircut		-	-	-	
			Client	Pre Haircut		-	-	-	
			Client	Post Haircut		-	-	-	
			Total	Pre Haircut		-	-	-	
			Total	Post Haircut		-	-	-	
6.2.3		Secured cash deposited at commercial bank	House	Pre Haircut		3,613	95,904	14,277	
			House	Post Haircut		3,613	95,904	14,277	
			Client	Pre Haircut		3,561	276,155	33,062	
			Client	Post Haircut		3,561	276,155	33,062	
			Total	Pre Haircut		7,174	372,059	47,338	
			Total	Post Haircut		7,174	372,059	47,338	
6.2.4		Unsecured cash deposited at commercial banks	House	Pre Haircut		-	-	-	
			House	Post Haircut		-	-	-	
			Client	Pre Haircut		-	-	-	
			Client	Post Haircut		-	-	-	
			Total	Pre Haircut		-	-	-	
			Total	Post Haircut		-	-	-	
6.2.5	Total initial margin held - Non-cash	Sovereign government bonds - domestic	House	Pre Haircut		11,686	-	-	
			House	Post Haircut		11,527	-	-	
			Client	Pre Haircut		2,417	-	-	
			Client	Post Haircut		2,374	-	-	
			Total	Pre Haircut		14,103	-	-	
		Total	Post Haircut		13,901	-	-		
6.2.6		Sovereign government bonds - other	House	Pre Haircut		0	-	-	
			House	Post Haircut		0	-	-	
			Client	Pre Haircut		0	-	-	
			Client	Post Haircut		0	-	-	
	Total		Pre Haircut		0	-	-		
	Total	Post Haircut		0	-	-			
6.2.7	Agency bonds	House	Pre Haircut		0	-	-		
		House	Post Haircut		0	-	-		
		Client	Pre Haircut		0	-	-		
		Client	Post Haircut		0	-	-		
		Total	Pre Haircut		0	-	-		
	Total	Post Haircut		0	-	-			
6.2.8	State/municipal bonds	House	Pre Haircut		0	-	-		
		House	Post Haircut		0	-	-		
		Client	Pre Haircut		0	-	-		
		Client	Post Haircut		0	-	-		
		Total	Pre Haircut		0	-	-		
	Total	Post Haircut		0	-	-			
6.2.9	Corporate bonds	House	Pre Haircut		0	-	-		
		House	Post Haircut		0	-	-		
		Client	Pre Haircut		0	-	-		
		Client	Post Haircut		0	-	-		
		Total	Pre Haircut		0	-	-		
	Total	Post Haircut		0	-	-			
6.2.10	Equities	House	Pre Haircut		20,320	-	-		
		House	Post Haircut		14,220	-	-		
		Client	Pre Haircut		497	-	-		
		Client	Post Haircut		348	-	-		
		Total	Pre Haircut		20,818	-	-		
	Total	Post Haircut		14,569	-	-			
6.2.11	Commodities - Gold	House	Pre Haircut		-	-	-		
		House	Post Haircut		-	-	-		
		Client	Pre Haircut		-	-	-		
		Client	Post Haircut		-	-	-		
		Total	Pre Haircut		-	-	-		
	Total	Post Haircut		-	-	-			
6.2.12	Commodities - Other	House	Pre Haircut		-	-	-		
		House	Post Haircut		-	-	-		
		Client	Pre Haircut		-	-	-		
		Client	Post Haircut		-	-	-		
		Total	Pre Haircut		-	-	-		
	Total	Post Haircut		-	-	-			
6.2.13	Mutual funds / UCIT s	House	Pre Haircut		-	-	-		
		House	Post Haircut		-	-	-		
		Client	Pre Haircut		-	-	-		
		Client	Post Haircut		-	-	-		
		Total	Pre Haircut		-	-	-		
	Total	Post Haircut		-	-	-			
6.2.14	Other	House	Pre Haircut		-	-	-		
		House	Post Haircut		-	-	-		
		Client	Pre Haircut		-	-	-		
		Client	Post Haircut		-	-	-		
		Total	Pre Haircut		-	-	-		
	Total	Post Haircut		-	-	-			
6.2.15	Total initial margin held	Total	House	Pre Haircut		35,619	95,904	14,277	
			House	Post Haircut		29,361	95,904	14,277	
			Client	Pre Haircut		6,476	276,155	33,062	
			Client	Post Haircut		6,283	276,155	33,062	
			Total	Pre Haircut		42,095	372,059	47,338	
			Total	Post Haircut		35,644	372,059	47,338	

6.3.1	Initial margin rates	Initial margin rates on individual contracts where the CCP sets such rates		-	-	<a href="http://www.tfx.co.jp/cgi-bin/param_e.cgi">http://www.tfx.co.jp/cgi-bin/param_e.cgi</a>	<a href="http://www.click365.jp/en/ti006.shtml">http://www.click365.jp/en/ti006.shtml</a> <a href="http://www.click365.jp/en/ti006_02.shtml">http://www.click365.jp/en/ti006_02.shtml</a>	(Only available in Japanese) <a href="http://www.click365.jp/cfd/service/margin.shtml">http://www.click365.jp/cfd/service/margin.shtml</a>	
6.4.1	Initial margin model	Type of IM model		2016/12/30	2016/12/30	SPAN® method	Fixed leverage ratio method	Historical volatility method	(6.4.1)For Transactions by Individual Customers of Exchange FX Margin contracts, TFX determines the Margin Reference Amount based on the maximum leverage ratio of 25 times as prescribed in the relevant laws and regulations. For Transactions by Trading Members or non-individual customers,TFX determines the Margin Reference Amount under the TFX rules based on maximum leverage ratio of 150 times or 25 times depending on currency pairs.  (Note)(6.4.5)For Transactions by Individual Customers of Exchange FX Margin contracts, TFX determines the Margin Reference Amount based on the maximum leverage ratio of 25 times as prescribed in the relevant laws and regulations. TFX has confirmed that the ratio fully covers confidence level of 99% or more in price movement data used in stress test with respect to at least three major currency pairs (USD/JPY, EUR/JPY, AUD/JPY).  (Note)(6.4.6, 6.4.8, 6.4.10, 6.4.12, 6.4.15) Since TFX adopted the Financial Resources Framework in July 2015, those parameters are reviewed once a year as part of the validation of overall risk management framework.
6.4.2		Type of IM model change effective date				1996/4/8	2011/8/1	2013/8/5	
6.4.3		IM model name				SPAN®	-	-	
6.4.4		IM model name change effective date				-	-	-	
6.4.5		Single-tailed confidence level targeted				99%	(Note)	99%	
6.4.6		Single-tailed confidence level change				(Note)	(Note)	(Note)	
6.4.7		Sample/data look-back period for calibrating the model				6months	Individual Customers : 1week Non-individual Customers : 4weeks	24weeks	
6.4.8		Look back period change effective date				(Note)	(Note)	(Note)	
6.4.9		Adjustments or scalars or weighting, if any, applied to historical data				-	-	-	
6.4.10		Adjustments change effective date				(Note)	(Note)	(Note)	
6.4.11		Close-out/holding periods				1day	1day	1day	
6.4.12		Close-out/holding periods effective date				(Note)	(Note)	(Note)	
6.4.13		IM rates link				<a href="http://www.tfx.co.jp/cgi-bin/param_e.cgi">http://www.tfx.co.jp/cgi-bin/param_e.cgi</a>	<a href="http://www.click365.jp/en/ti006.shtml">http://www.click365.jp/en/ti006.shtml</a> <a href="http://www.click365.jp/en/ti006_02.shtml">http://www.click365.jp/en/ti006_02.shtml</a>	<a href="http://www.click365.jp/cfd/service/margin.shtml">http://www.click365.jp/cfd/service/margin.shtml</a>	
6.4.14		Frequency of parameter reviews				monthly	Individual Customers : weekly Non-individual Customers : monthly	weekly	
6.4.15		Frequency of parameter reviews change effective date				(Note)	(Note)	(Note)	
6.5.1.1	Results of back-testing of initial margin	Number of times over the past 12 months that margin coverage held against any account fell below the actual marked-to-market exposure of that member account - based on daily back-testing results		2016/1/1	2016/12/30	14	99	36	(Note)(6.5.4)Peak that margin coverage held against a clearing member fell below the actual marked-to-market exposure of that member account - based on daily back-testing results.
6.5.1.2		Frequency of daily back-testing result measurements				daily	daily	daily	(Note)(6.5.5)Average that margin coverage held against a clearing member fell below the actual marked-to-market exposure of that member account - based on daily back-testing results.
6.5.1.3		Time of daily back-testing result if measured once a day				17:00:00	6:00:00	6:00:00	
6.5.2		Number of observations				4,229days	5,950days	3,383days	
6.5.3		Achieved coverage level				99.7%	98.3%	98.9%	
6.5.4		Where breaches of initial margin coverage have occurred, report on size of uncovered exposure; Peak size	Peak			379	14,656	653	
6.5.5		Where breaches of initial margin coverage have occurred, report on size of uncovered exposure; Average Size	Average			78	898	129	
6.6.1	Total Variation Margin	Average Total Variation Margin Paid to the CCP by participants each business	Average	2016/10/1	2016/12/30	72	2,392	244	
6.7.1		Maximum total variation margin paid to the CCP on any given business day over the	Peak			215	7,305	988	
6.8.1		Maximum aggregate initial margin call on any given business day over the period				104	1,762	33	

Disclosure				Frequency		Clearing Service			Comments
Ref.No.	Disclosure Description			Start Date	End Date	Interest Rate Futures Contracts	Exchange Forex Margin Contracts	Exchange Equity Index Margin	
7.1.1	Liquidity Risk	Liquidity Risk that are covered by liquid resources	Number of expected defaulting members	2016/12/30	2016/12/30	4	3	2	(7.1.1)The number of expected defaulting members is defined as one Clearing Member that would potentially cause the largest risk to TFX and several Clearing Members with the lowest amount of net assets. Interest Rate Futures Contracts : 3members / Exchange Forex Margin Contracts : 2members / Exchange Equity Index Margin Contracts : 1 member.  (7.1.4)"Secured cash deposited at commercial bank" refers to the cash deposited at ordinary deposit account or fixed deposit account in commercial bank, which does not incur any loss at the maturity.  (7.1.7)The liquidity supply facilities are set with several commercial banks designated as the Settlement Banks and TFX can utilize the funds within the same day upon taking procedural steps provided in the applicable agreements.
7.1.2		Size and composition of qualifying liquid resources for each clearing service	Cash deposited at a central bank of issue of the currency concerned			0	0	0	
7.1.3		Cash deposited at other central banks				0	0	0	
7.1.4		Secured cash deposited at commercial banks				0	156,557	31,644	
7.1.5		Unsecured cash deposited at commercial banks				0	0	0	
7.1.6		Secured committed lines of credit including committed foreign exchange swaps and committed lines of credit				0	0	0	
7.1.7		Unsecured committed lines of credit				29,000	0	0	
7.1.8		Highly marketable collateral held in custody and investments that are readily available and convertible into cash with prearranged and highly reliable funding arrangements even in extreme but plausible market conditions				0	0	0	
7.1.9		other				0	0	0	
7.1.10		State whether the CCP has routine access to central bank liquidity or facilities				None.			
7.1.11	Details regarding the schedule of payments or priority for allocating payments	Any applicable rule, policy, procedure, and governance arrangement around such decision making			<a href="http://www.tfx.co.jp/en/rules/document/a1a08_en.pdf">http://www.tfx.co.jp/en/rules/document/a1a08_en.pdf</a>			(7.1.10) TFX has an account at the Bank of Japan for settlement purpose.	
7.2.1	Supplementary liquidity risk resources	Size and composition of any supplementary liquidity risk resources		-	-			6,284	

7.3.1	Liquidity Risk	Estimated largest same-day and, where relevant, intraday and multiday payment obligation ("ELPO") in total that would be caused by the default of any single participant and its affiliates in extreme but plausible market conditions	SameDayPayment IntraDayPayment MultiDayPayment	SameDayPayment	2016/1/1	2016/12/30	4,391	56,785	5,145	
IntraDayPayment				-			-	-		
MultiDayPayment				-			-	-		
SameDayPayment				4,391			56,785	5,145		
IntraDayPayment				-			-	-		
MultiDayPayment				-			-	-		
7.3.2			Number of business days, if any, on which the above amount exceeded its qualifying liquid resources				0	0	0	
7.3.3			Number of business days, if any, on which the above amount exceeded its qualifying liquid resources				0	0	0	
7.3.4		Actual largest intraday and multiday payment obligation of a single participant and its affiliates (Peak day amount) (Note)	SameDayPayment	SameDayPayment			565	49,396	6,248	
IntraDayPayment				-			-	-		
MultiDayPayment				-			-	-		
SameDayPayment				565			49,396	6,248		
IntraDayPayment				-			-	-		
MultiDayPayment				-			-	-		
7.3.5	Estimated largest same-day and, where relevant, intraday and multiday payment obligation in each relevant currency that would be caused by the default of any single participant and its affiliates (Peak day amount in previous 3 months)	SameDayPayment	SameDayPayment				-	-	-	(7.3.5~7.3.7)TFX does not make a foreign exchange settlement.
IntraDayPayment			-				-	-		
MultiDayPayment			-				-	-		
7.3.6			Number of business days, if any, on which the above amounts exceeded its qualifying liquid resources				-	-	-	
7.3.7			Report the number of business days, if any, on which the above amounts exceeded its qualifying liquid resources				-	-	-	

Principle 13 Default rules and Procedures

Ref.No.	Disclosure Description		Frequency		Clearing Service			Comments
			Start Date	End Date	Interest Rate Futures Contracts	Exchange Forex Margin Contracts	Exchange Equity Index Margin	
13.1.1	Quantitative information related to defaults	Quantitative information related to defaults; Amount of loss versus amount of initial	2016/10/1	2016/12/30	-	-	-	
13.1.2		Quantitative information related to defaults; Amount of other financial resources used to cover losses			-	-	-	
13.1.3.1		Quantitative information related to defaults; Proportion of client positions closed-out			-	-	-	
13.1.3.2		Quantitative information related to defaults; Proportion of client positions ported			-	-	-	
13.1.4		Quantitative information related to defaults; Appropriate references to other published material related to the defaults			-	-	-	

Principle 14 Segregation and Portability

Disclosure			Frequency		Clearing Service			Comments
Ref.No.	Disclosure Description		Start Date	End Date	Interest Rate Futures Contracts	Exchange Forex Margin Contracts	Exchange Equity Index Margin	
14.1.1	Total Client Positions	Total Client Positions held in individually segregated accounts	2016/12/30	2016/12/30	0%	100%	100%	
14.1.2		Total Client Positions held in omnibus client-only accounts, other than LSOC accounts			100%	0%	0%	
14.1.3		Total Client Positions held in legally segregated but operationally comingled (LSOC) accounts			0%	0%	0%	
14.1.4		Total Client Positions held in comingled house and client accounts			0%	0%	0%	

Principle 15 General Business Risk

(Unit : Millions of yen)

Disclosure			Frequency		Clearing Service			Comments
Ref.No.	Disclosure Description		Start Date	End Date	Interest Rate Futures Contracts	Exchange Forex Margin Contracts	Exchange Equity Index Margin	
15.1.1	Financial items	Value of liquid net assets funded by equity	2015/4/1	2016/3/31			16,966	(15.1.2) Six months of current operating expenses after subtracting the following items. 1. The amount of depreciation expense. 2. The amount of incentive program fees (4,158 million yen). Trading service fees received from Market Maker include the incentive program fees (4,158 million yen) to be passed through trading members. Both Total revenue and Total expenditure on the Financial Statements include the incentive program fees.
15.1.2		Six months of current operating expenses					1,684	
15.2.1		Total Revenue (Operating revenue)	2015/4/1	2016/3/31			9,316	
15.2.2		Total Expenditure (Operating expenditure)					9,158	
15.2.3		Profits					158	
15.2.4		Total Assets					559,647	
15.2.5		Total Liabilities					538,379	
15.2.6	Explain if collateral posted by clearing participants is held on or off the CCP's balance sheet	(Note)						
15.2.7	Additional items as necessary	-						
15.3.1	Percentage of total income that comes from fees related to provision of clearing services		2015/4/1	2016/3/31			87.89%	(15.3.1) Trading service fees include clearing service fees.
15.3.2							Percentage of total income that comes from the reinvestment (or rehypothecation) of assets provided by clearing participants	

Disclosure				Frequency		Clearing Service			Comments
Ref.No.	Disclosure Description			Start Date	End Date	Interest Rate Futures Contracts	Exchange Forex Margin Contracts	Exchange Equity Index Margin	
16.1.1	Total cash received	Initial margin		2016/12/30	2016/12/30	7,174	372,059	47,338	
16.1.2		Default fund, received from participants				2,043	11,419	957	
16.2.1	How the total cash received from participants is held / deposited / invested	Percentage of this total participant cash held as cash deposits		2016/12/30	2016/12/30	100%	100%	100%	(16.2.4) "Secured : as cash deposits at commercial banks" refers to the cash deposited at ordinary deposit account or fixed deposit account in commercial bank, which does not incur any loss at the maturity.  (Note) (16.2.9) All cash received from participants is deposited at ordinary deposit account in commercial banks.  (16.2.10~16.2.20) All cash received from participants is deposited at commercial banks, and it's not invested in securities.
16.2.2		Percentage held : as cash deposits at central banks of issue of the currency deposited				0%	0%	0%	
16.2.3		Percentage held : as cash deposits at other central banks				0%	0%	0%	
16.2.4		Percentage held : as cash deposits at commercial banks	Secured (including through reverse repo)			100%	100%	100%	
16.2.5		Percentage held : as cash deposits at commercial banks	Unsecured			0%	0%	0%	
16.2.6		Percentage held : as cash deposits in money market funds				0%	0%	0%	
16.2.7		Percentage held : as cash deposits in other forms				0%	0%	0%	
16.2.8		Percentage split by currency of these cash deposits	Local currency, JPY			100%	100%	100%	
16.2.9		Percentage held as cash deposits				100%	100%	100%	
		Weighted average maturity of these cash deposits and money market funds				(Note)	0.61years	0.62years	
16.2.10		Percentage of this total participant cash invested in securities	Domestic			-	-	-	
16.2.11		Percentage invested in : sovereign government bonds	Other			-	-	-	
16.2.12		Percentage invested in : agency bonds				-	-	-	
16.2.13		Percentage invested in : state/municipal				-	-	-	
16.2.14		Percentage invested in : other instruments				-	-	-	
16.2.15		Percentage split by currency of these securities				-	-	-	
16.2.16		Weighted average maturity of these securities				-	-	-	
16.2.17		Estimate of the risk on the investment				-	-	-	
16.2.18	Investment policy sets a limit on the proportion of the investment portfolio that may be allocated to a single counterparty, and the size of that limit		-	-	-				
16.2.19	Number of times over the previous quarter in which this limit has been exceeded		-	-	-				
16.2.20	Percentage of total participant cash held as securities		0%	0%	0%				
16.3.1	Rehypothecation of participant assets	Total value of participant non-cash rehypothecated	Initial margin	2016/12/30	2016/12/30	-	-	-	(16.3) Participant assets are not rehypothecated by TFX.
16.3.2		Total value of participant non-cash rehypothecated	Default fund			-	-	-	
16.3.3		Maturities	Initial margin			-	-	-	
16.3.4		Maturities	Default fund			-	-	-	

## Principle 17 Operational Risk

Disclosure				Frequency		Clearing Service			Comments
Ref.No.	Disclosure Description			Start Date	End Date	Interest Rate Futures Contracts	Exchange Forex Margin Contracts	Exchange Equity Index Margin	
17.1.1	Operational availability target for the core systems	Operational availability target for the core systems involved in clearing over specified period for the system		-	-	100%	100%	100%	
17.2.1		Actual availability of the core systems		2016/1/1	2016/12/30	100%	100%	100%	
17.3.1		Total number of failures		0	0	0	0	0	
17.4.1		Recovery time objectives		-	-	2hours	2hours	2hours	



Principle 18 Access and Participation Requirements

Disclosure				Frequency		Clearing Service			Comments
Ref.No.	Disclosure Description			Start Date	End Date	Interest Rate Futures Contracts	Exchange Margin Contracts	Exchange Equity Index Margin	
18.1.1.1	Number of clearing members	General clearing members		2016/12/30	2016/12/30	30	0	0	
18.1.1.2		Direct clearing members				0	22	13	
18.1.1.3		Others category				0	0	0	
18.1.2.1		Central bank participants				0	0	0	
18.1.2.2		CCP participants				0	0	0	
18.1.2.3		Bank participants				13	4	0	
18.1.2.4		Other participants				17	18	13	
18.1.3.1		Domestic participants				29	20	13	
18.1.3.2	Foreign participants		1	2	0				
18.2.1	Open position concentration	Fewer than 25 members	Largest five members	2016/10/1	2016/12/30	-	82%	86%	
			Peak			-	79%	85%	
		Average	-			-	-		
18.2.2		25 or more members	Largest five members			Peak	72%	-	-
			Average			67%	-	-	
18.2.3		Largest ten members	Peak			94%	-	-	
	Average		93%	-	-				
18.3.1	Initial margin concentration	Fewer than 25 members	Largest five members	2016/10/1	2016/12/30	-	85%	79%	
			Peak			-	84%	74%	
		Average	-			-	-		
18.3.2		25 or more members	Largest five members			Peak	64%	-	-
			Average			61%	-	-	
18.3.3		Largest ten members	Peak			85%	-	-	
	Average		83%	-	-				
18.4.1	Segregated default fund concentration	Fewer than 25 members	Largest five members	2016/12/30	2016/12/30	-	23%	87%	
18.4.2			25 or more members			Largest five members	33%	-	-
18.4.3						Largest ten members	53%	-	-

Principle 19 Tiered Participation Arrangements

Disclosure				Frequency		Clearing Service			Comments
Ref.No.	Disclosure Description			Start Date	End Date	Interest Rate Futures Contracts	Exchange Margin Contracts	Exchange Equity Index Margin	
19.1.1	Measures of concentration of client clearing	Number of clients (accounts)		2016/10/1	2016/12/30	-	772,165	59,966	
19.1.2		Number of direct members that clear for clients				30	17	12	
19.1.3.1		Percent of client transactions	Attributable to the top five clearing			Peak	99%	88%	93%
19.1.3.2			Average			92%	77%	88%	
19.1.4.1		Attributable to the top ten clearing	Peak			100%	-	-	
19.1.4.2			Average			100%	-	-	

Principle 23 Disclosure of Rules, Key Procedures, and Market Data

(Unit : Millions of yen)

Disclosure				Frequency		Clearing Service			Comments
Ref.No.	Disclosure Description			Start Date	End Date	Interest Rate Futures Contracts	Exchange Margin Contracts	Exchange Equity Index Margin	
23.1.1	Market data	Average daily volumes		2016/10/1	2016/12/30	8,684lots	174,932lots	19,318lots	
23.1.2		Average notional value of trades cleared				867,904	184,005	27,582	
23.2.1		Gross notional outstanding/total settlement value of novated but not-yet settled securities transactions		2016/12/30	2016/12/30	15,947,418	1,342,524	385,844	
23.2.2		Asset class				Interest Rate	FX	Equity Index	
23.2.3		Product type				Futures/Option	Forex	CFD	
23.2.4		Product code				Bloomberg YEA	-	-	
						Reuters 0#JEY	0#TFXFX	TFX/CFD/INDEX	
23.3.1		Average daily volumes submitted by Execution facility or matching/confirmation		2016/10/1	2016/12/30	8,254lots	167,324lots	23,164lots	
23.3.2		Notional contract values submitted by Execution facility or matching/confirmation				867,904	184,005	27,582	