

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	Daily Futures Contracts		
4.1.1	Total value of default resources (excluding initial and retained variation margin)	Prefunded Own Capital	Before		2017/9/29	2017/9/29	1,000	2,000	
4.1.2			Alongside				0	0	
4.1.3			After				0	0	
4.1.4		Prefunded Participant contributions	Required				2,194	3,806	
4.1.5			Posted	Post-Haircut			7,168	22,638	
4.1.6		Prefunded Other					0	0	
4.1.7		Committed Own/parent funds	Round of participant defaults		2017/9/29	2017/9/29	0	0	
4.1.8		Committed Participant commitments	Initial round of participant default				0	0	
4.1.9			Replenish the default fund				unlimited	unlimited	
4.1.10		Committed Other					0	0	
4.2.1	KCCP	BCBS 282			2017/9/29	2017/9/29	119	0	(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.
4.3.1	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	2017/9/29	2017/9/29	-	-	
			Post-Haircut			-	-		
4.3.2			Cash deposited at other central banks	Pre-Haircut			-	-	
			Post-Haircut			-	-		
4.3.3		Secured cash deposited at	Pre-Haircut			3,216	18,862		
			Post-Haircut			3,216	18,862		
4.3.4		Unsecured cash deposited at	Pre-Haircut			0	0		
			Post-Haircut			0	0		
4.3.5		Non-cash	Sovereign Government Bonds -	Pre-Haircut			2,178	5,494	
				Post-Haircut			2,128	5,406	
4.3.6			Sovereign Agency Bonds	Pre-Haircut			0	0	
				Post-Haircut			0	0	
4.3.7			State/municipal bonds	Pre-Haircut			0	0	
				Post-Haircut			0	0	
4.3.8			Corporate bonds	Pre-Haircut			0	0	
	Post-Haircut					0	0		
4.3.9	Equities		Pre-Haircut			4,035	529		
			Post-Haircut			2,824	370		
4.3.10	Commodities - Gold		Pre-Haircut			-	-		
		Post-Haircut			-	-			
4.3.11	Commodities - Other	Pre-Haircut			-	-			
		Post-Haircut			-	-			
4.3.12	Commodities - Mutual Funds/UCITs	Pre-Haircut			-	-			
		Post-Haircut			-	-			
4.3.13	Commodities - Other	Pre-Haircut			-	-			
		Post-Haircut			-	-			
4.3.14	In total	Pre-Haircut			9,430	24,885			
4.3.15		Post-Haircut			8,168	24,638			

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	2016/10/1	2017/9/29	4	3	(4.4.1) The number of expected defaulting members is defined as one Clearing Member that would potentially cause the largest credit risk to TFX and several Clearing Members with the lowest amount of net assets.
4.4.2		The number of business days within which the CCP assumes it will close out default when calculating credit exposures that <u>would potentially need to be covered by the default fund</u>			1day	1day	Interest Rate Futures Contracts : 3 members / Daily Futures Contracts: 2 members
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					(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
					(a)	(b)	
					17,001	3,736	
					5,719	1,318	
					3,331	5,775	
					2,175	2,576	
4.4.4		The number of business days, if any, on which the above amount (4.4.3) exceeded <u>actual pre-funded default resources</u>					(4.4.3-4.4.6) On February 27, 2017, FX Daily Futures Clearing Membership and Equity Index Daily Futures Clearing Membership were merged.
					(a)	(b)	
					0days	3days	
					1day	0days	
4.4.5		The amount in 4.4.3 which exceeded actual pre-funded default resources					(a)FX Daily Futures Contracts and (b) Equity Index Daily Futures Contracts before the merger of memberships are shown in Column A. (October 1, 2016 - February 24, 2017)
					(a)	(b)	
					-	275	
					-	194	
					-	99	
					88	-	
					-	-	
					-	-	
					-	-	
					-	-	
					-	-	
4.4.6		The actual largest aggregate credit exposure to any single participant and its affiliates					Interest Rate Futures Contracts of all periods and Daily Futures Contracts after the merger of memberships are shown in column B, (February 27, 2017 – September 29, 2017)
					(a)	(b)	
					118	10	
					115	10	
					0	0	Before the merger of memberships, we have adopted the financial resource system with 60% of the ELL as the necessary amount of advance contribution. It shows the number of days in which advance contribution fell short of the requirement and the shortage needed to meet the requirement.
					0	0	After the merger of memberships, 100% of the ELL is adopted as the amount of advance contribution.
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					
4.4.8		The number of business days, if any, on which the above amount (4.4.3) exceeded <u>actual pre-funded default resources</u>					
4.4.9		The amount in 4.4.3 which exceeded actual pre-funded default resources					
4.4.10		The actual largest aggregate credit exposure to any two participants and their affiliates					

Principle 5 Collateral

Ref.No.	Disclosure		Frequency		Clearing Service		Comments
	Disclosure Description		Start Date	End Date	Interest Rate Futures Contracts	Daily Futures Contracts	
5.1.1	Collateral	Assets eligible, and the respective haircuts applied	Initial margin	-	-	https://www.tfx.co.jp/en/rules/pdf/a1a09_en.pdf	
5.2.1		Pre-funded participant contributions to the default resources				https://www.tfx.co.jp/en/rules/pdf/a7a02_en.pdf	
5.3.1	Results of testing of haircuts	Confidence interval targeted through the calculation of haircut	2017/7/1	2017/9/29	100%	100%	
5.3.2		Assumed holding/liquidation period for the assets accepted			4days	4days	
5.3.3		Look-back period used for testing the haircuts			1year	1year	
5.3.4		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			0day	0day	

Ref.No.	Disclosure			Frequency		Clearing Service			Comments	
	Disclosure Description			Start Date	End Date	Interest Rate Futures Contracts	FX Daily Futures Contracts	Equity Index Daily Futures Contracts		
6.1.1	Total initial margin required	Total initial margin required	House Net	2017/9/29	2017/9/29	384	22,280	7,223	(6.1.1)"Total initial margin required" of TFX_FX and TFX_CFD includes the amount of variation margin.	
			Client Gross			-	67,237	3,504		
			Client Net			1,293	-	-		
			Total			1,678	89,517	10,727		
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		2,831	96,860	11,588		
			House	Post Haircut		2,831	96,860	11,588		
			Client	Pre Haircut		3,106	293,560	43,988		
			Client	Post Haircut		3,106	293,560	43,988		
			Total	Pre Haircut		5,937	390,420	55,576		
			Total	Post Haircut		5,937	390,420	55,576		
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		11,581	-	-		
			House	Post Haircut		11,313	-	-		
			Client	Pre Haircut		2,389	-	-		
			Client	Post Haircut		2,333	-	-		
			Total	Pre Haircut		13,970	-	-		
		Total	Post Haircut		13,646	-	-			
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		20,855	-	-			
		House	Post Haircut		14,594	-	-			
		Client	Pre Haircut		487	-	-			
		Client	Post Haircut		341	-	-			
		Total	Pre Haircut		21,342	-	-			
	Total	Post Haircut		14,934	-	-				
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		35,267	96,860	11,588		
			House	Post Haircut		28,738	96,860	11,588		
			Client	Pre Haircut		5,982	293,560	43,988		
			Client	Post Haircut		5,779	293,560	43,988		
			Total	Pre Haircut		41,250	390,420	55,576		
			Total	Post Haircut		34,518	390,420	55,576		

6.3.1	Initial margin rates	Initial margin rates on individual contracts where the CCP sets such rates	Interest Rate Futures Contracts FX Daily Futures Contracts Equity Index Daily Futures Contracts			https://www.tfx.co.jp/en/historical/futures/spparam.html Individual Customers: https://www.click365.jp/en/start/start06_02.html Non-individual Customers and Market Makers: https://www.click365.jp/en/start/start06.html https://www.clickkabu365.jp/en/start/start05.html			
6.4.1	Initial margin model	Type of IM model	Interest Rate Futures Contracts FX Daily Futures Contracts Equity Index Daily Futures Contracts			SPAN® method Individual Customers: Fixed leverage ratio(x25) method Non-individual Customers: Historical volatility method Market Makers: Historical volatility method with the limit of maximum Customers: Historical volatility method Market Makers: Historical volatility method with the limit of maximum	(6.4.1)For Transactions by Individual Customers of FX Daily Futures contracts, TFX determines the Margin Reference Amount based on the maximum leverage ratio of 25 times as prescribed in the relevant laws and regulations. (Note)(6.4.5)For Transactions by Individual Customers of FX Daily Futures 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. (Note)(6.4.7)Non-individual Customers and Market Makers		
6.4.2		Type of IM model change effective date				1996/4/8	2017/2/27	2017/2/27	
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%	Individual Customers: (Note) Non-individual Customers and Market Makers: 99%	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	Non-individual Customers and Market Makers: 8weeks or 104weeks	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	Interest Rate Futures Contracts FX Daily Futures Contracts Equity Index Daily Futures Contracts			https://www.tfx.co.jp/en/historical/futures/spparam.html Individual Customers: https://www.click365.jp/en/start/start06_02.html Non-individual Customers and Market Makers: https://www.click365.jp/en/start/start06.html https://www.clickkabu365.jp/en/start/start05.html			
6.4.14	Frequency of parameter reviews				monthly	weekly	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		2016/10/1	2017/9/29	0	25	19	(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				4,057	8,168	3,867	
6.5.3		Achieved coverage level				100.0%	99.7%	99.5%	
6.5.4		Where breaches of initial margin coverage have occurred, report on size of uncovered exposure; Peak size	Peak			0	473	100	
6.5.5		Where breaches of initial margin coverage have occurred, report on size of uncovered exposure; Average Size	Average			0	51	15	
6.6.1	Total Variation Margin	Average Total Variation Margin Paid to the CCP by participants each business	Average	2017/7/1	2017/9/29	70	1,413	290	
6.7.1		Maximum total variation margin paid to the CCP on any given business day over the	Peak			388	3,722	1,585	
6.8.1		Maximum aggregate initial margin call on any given business day over the period				28	377	59	

Ref.No.	Disclosure			Frequency		Clearing Service		Comments
	Disclosure Description	Start Date	End Date	Interest Rate Futures Contracts	Daily Futures Contracts			
7.1.1	Liquidity Risk	Liquidity Risk that are covered by liquid resources	Number of expected defaulting members	2017/9/29	2017/9/29	4	3	(7.1.1)The number of expected defaulting members is defined as one Clearing Member that would potentially cause the largest liquidity risk to TFX and several Clearing Members with the lowest amount of net assets. Interest Rate Futures Contracts : 3members / Daily Futures Contracts : 2members. (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	
7.1.3		Cash deposited at other central banks				0	0	
7.1.4		Secured cash deposited at commercial banks				0	145,457	
7.1.5		Unsecured cash deposited at commercial banks				0	0	
7.1.6		Secured committed lines of credit including committed foreign exchange swaps and committed lines				0	0	
7.1.7		Unsecured committed lines of				29,000	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	
7.1.9		other				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			https://www.tfx.co.jp/en/rules/pdf/a1a08_en.pdf			
7.2.1	Supplementary liquidity risk resources	Size and composition of any supplementary liquidity risk resources		-	-		4,491	

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	SameDayPayment	2016/10/1	2017/9/29	4,391	22,944		
IntraDayPayment			IntraDayPayment	-			-			
MultiDayPayment			MultiDayPayment	-			-			
				4,391			22,944			
				-			-			
				-			-			
				-			-			
7.3.2		Number of business days, if any, on which the above amount exceeded its qualifying liquid resources					0	0		
7.3.3		Number of business days, if any, on which the above amount exceeded its qualifying liquid resources					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			184	14,870		
			IntraDayPayment	IntraDayPayment			-	-		
			MultiDayPayment	MultiDayPayment			-	-		
			SameDayPayment	SameDayPayment			184	14,870		
			IntraDayPayment	IntraDayPayment			-	-		
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			-	-		
			IntraDayPayment	IntraDayPayment			-	-		
7.3.6			Number of business days, if any, on which the above amounts exceeded its qualifying liquid resources					-	-	(7.3.5~7.3.7)TFX does not make a foreign exchange settlement.
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	Daily Futures Contracts	
13.1.1	Quantitative information related to defaults; Amount of loss versus amount of initial	2017/7/1	2017/9/29	-	-	
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	Daily Futures Contracts	
14.1.1	Total Client Positions	Total Client Positions held in individually segregated accounts	2017/9/29	2017/9/29	0%	100%	
14.1.2		Total Client Positions held in omnibus client-only accounts, other than LSOC accounts			100%	0%	
14.1.3		Total Client Positions held in legally segregated but operationally comingled (LSOC) accounts			0%	0%	
14.1.4		Total Client Positions held in comingled house and client accounts			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	Daily Futures Contracts	
15.1.1	Financial items	Value of liquid net assets funded by equity	2016/4/1	2017/3/31		17,265	
15.1.2		Six months of current operating expenses				1,491	
15.2.1		Total Revenue (Operating revenue)	2016/4/1	2017/3/31		8,647	
15.2.2		Total Expenditure (Operating expenditure)				8,073	
15.2.3		Profits				574	
15.2.4		Total Assets				479,784	
15.2.5		Total Liabilities				457,931	
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	2016/4/1	2017/3/31		88.64%	
15.3.2		Percentage of total income that comes from the reinvestment (or rehypothecation) of assets provided by clearing participants				3.73%	

Disclosure				Frequency		Clearing Service		Comments
Ref.No.	Disclosure Description			Start Date	End Date	Interest Rate Futures Contracts	Daily Futures Contracts	
16.1.1	Total cash received	Initial margin		2017/9/29	2017/9/29	5,937	445,996	
16.1.2		Default fund, received from participants				2,216	16,862	
16.2.1	How the total cash received from participants is held / deposited / invested	Percentage of this total participant cash held as cash deposits		2017/9/29	2017/9/29	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. (16.2.18) Investment is made obeying the management and operation rules for collateral.
16.2.2		Percentage held : as cash deposits at central banks of issue of the currency deposited				0%	0%	
16.2.3		Percentage held : as cash deposits at other central banks				0%	0%	
16.2.4		Percentage held : as cash deposits at commercial banks	Secured (including through reverse repo)			100%	100%	
16.2.5		Percentage held : as cash deposits at commercial banks	Unsecured			0%	0%	
16.2.6		Percentage held : as cash deposits in money market funds				0%	0%	
16.2.7		Percentage held : as cash deposits in other forms				0%	0%	
16.2.8		Percentage split by currency of these cash deposits	Local currency, JPY			100%	100%	
16.2.9		Percentage held as cash deposits				100%	100%	
		Weighted average maturity of these cash deposits and money market funds				(Note)	0.41 years	
16.2.10		Percentage of this total participant cash invested in securities	Domestic			-	0%	
16.2.11		Percentage invested in : sovereign government bonds	Other			-	0%	
16.2.12		Percentage invested in : agency bonds				-	0%	
16.2.13		Percentage invested in : state/municipal				-	0%	
16.2.14		Percentage invested in : other instruments				-	0%	
16.2.15		Percentage split by currency of these securities				-	0%	
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%		
16.3.1	Rehypothecation of participant assets	Total value of participant non-cash rehypothecated	Initial margin	2017/9/29	2017/9/29	-	-	(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	Daily Futures Contracts	
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%	
17.2.1		Actual availability of the core systems		2016/10/1	2017/9/29	100%	100%	
17.3.1		Total number of failures				0	0	
17.4.1		Recovery time objectives				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	Daily Futures Contracts			
18.1.1.1	Number of clearing members	General clearing members			2017/9/29	2017/9/29	30	0		
18.1.1.2		Direct clearing members					0	26		
18.1.1.3		Others category					0	0		
18.1.2.1		Central bank participants					0	0		
18.1.2.2		CCP participants					0	0		
18.1.2.3		Bank participants					13	4		
18.1.2.4		Other participants					17	22		
18.1.3.1		Domestic participants					29	24		
18.1.3.2	Foreign participants			1	2					
18.2.1	Open position concentration	Fewer than 25 members	Largest five members	Peak	2017/7/1	2017/9/29	-	-		
				Average			-	-		
18.2.2		25 or more members	Largest five members	Peak			63%	73%		
				Average			55%	71%		
18.2.3		Largest ten members	Peak	91%	87%					
			Average	89%	86%					
18.3.1	Initial margin concentration	Fewer than 25 members	Largest five members	Peak	2017/7/1	2017/9/29	-	-		
				Average			-	-		
18.3.2		25 or more members	Largest five members	Peak			64%	79%		
				Average			63%	79%		
18.3.3		Largest ten members	Peak	86%	91%					
			Average	85%	91%					
18.4.1	Segregated default fund concentration	Fewer than 25 members	Largest five members		2017/9/29	2017/9/29	-	-		
18.4.2			25 or more members	Largest five members				30%		66%
18.4.3							Largest ten members			50%

Principle 19 Tiered Participation Arrangements

Disclosure				Frequency		Clearing Service		Comments	
Ref.No.	Disclosure Description			Start Date	End Date	Interest Rate Futures Contracts	Daily Futures Contracts		
19.1.1	Measures of concentration of client clearing	Number of clients (accounts)			2017/7/1	2017/9/29	-	933,017	
19.1.2		Number of direct members that clear for clients					30	26	
19.1.3.1		Percent of client transactions	Attributable to the top five clearing	Peak			100%	73%	
19.1.3.2				Average			93%	63%	
19.1.4.1		Attributable to the top ten clearing		Peak			100%	91%	
19.1.4.2				Average			100%	89%	

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	FX Daily Futures Contracts	Equity Index Daily Futures Contracts	
23.1.1	Market data	Average daily volumes		2017/7/1	2017/9/29	6,043lots	112,280lots	28,498lots	
23.1.2		Average notional value of trades cleared				603,920	113,678	56,199	
23.2.1		Gross notional outstanding/total settlement value of novated but not-yet settled securities transactions		2017/9/29	2017/9/29	13,090,744	1,481,337	587,120	
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 Reuters	YEA	-	
23.3.1		Average daily volumes submitted by Execution facility or matching/confirmation		2017/7/1	2017/9/29	6,043lots	112,280lots	28,498lots	
23.3.2		Notional contract values submitted by Execution facility or matching/confirmation				603,920	113,678	56,199	