

# *Tokyo Foreign Exchange Market Committee*

January 29, 2013

## **Results of Turnover Survey of Tokyo Foreign Exchange Market**

The Tokyo Foreign Exchange Market Committee (TFEMC) today released the results of its Turnover Survey of Tokyo Foreign Exchange Market covering transactions in October 2012 (see attached tables).

The TFEMC conducts the survey in order to provide market participants with the developments of the Tokyo foreign exchange market in an accurate and timely manner, thereby contributing to the sound growth of the market. In conducting the survey, the Financial Markets Department of the Bank of Japan provides technical assistance in collecting and processing the data of respective respondents.

The TFEMC had carried out the survey annually covering foreign exchange transactions in April until 2011, but increased the frequency of the survey from once a year to twice a year covering transactions both in April and October in order to grasp the market developments more timely. This is the first survey covering transactions in October and the eighth survey since the survey started in 2006.

The monthly foreign exchange turnover in October 2012 increased slightly compared with the last survey covering transactions in April 2012. Regarding the trading instrument, the turnover in spot and forward transactions decreased, while that in swap transactions increased significantly. Foreign exchange options remained almost flat. By execution method, the volume of electronic trading, which had decreased in April 2012, increased compared with the last survey, while the volume of non-electronic trading such as trading through voice brokers with non-financial institutions decreased significantly.

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<Notes>

The TFEMC conducts the turnover survey on foreign exchange and OTC derivatives market activity. The TFEMC had carried out the survey annually covering foreign exchange transactions in April until 2011 but increased the frequency of the survey in 2012 from once a year to twice a year covering transactions both in April and October. The attached results show the turnover in October 2012. This survey covers 32 financial institutions in the same way as the last survey and summarizes three types of foreign exchange transactions (spot, foreign exchange swap, and forward transactions) and one type of derivatives (foreign exchange options). Similar surveys are conducted and released by overseas foreign exchange market committees.

## Reporting Financial Institutions

Bank of America	Australia and New Zealand Banking Group
Bank of Tokyo-Mitsubishi UFJ	Bank of New York Mellon
Barclays Bank PLC	Commerzbank AG
BNP Paribas	Credit Suisse Securities
Citibank	Hongkong and Shanghai Banking Corporation
Credit Agricole CIB	Morgan Stanley MUFG Securities
Deutsche Securities	Nomura Trust and Banking
Goldman Sachs Securities	Norinchukin Bank
J.P. Morgan Chase Bank	Resona Bank
Mitsubishi UFJ Trust and Banking Corporation	Royal Bank of Canada
Mizuho Bank	Shinsei Bank
Mizuho Corporate Bank	Standard Chartered Bank
Nomura Securities	Trust and Custody Services Bank
Royal Bank of Scotland	
Societe Generale	
State Street Bank and Trust Company	
Sumitomo Mitsui Banking Corporation	
Sumitomo Mitsui Trust Bank	
UBS AG	

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<Table 1> Aggregate Turnover<sup>1/</sup>

(Daily averages in hundred millions of USD)  
(Figures in parentheses represent percentage of total)

	April 2008	April 2009	April 2010	April 2011	April 2012	October 2012	
							Changes <sup>2/</sup>
Spot	1,053 < 34.8 >	702 < 27.6 >	965 < 36.6 >	1,062 < 37.3 >	1,000 < 35.4 >	903 < 30.1 >	▲ 9.6
FX Swap	1,596 < 52.8 >	1,589 < 62.5 >	1,308 < 49.6 >	1,407 < 49.5 >	1,406 < 49.7 >	1,741 < 57.9 >	+ 23.9
Forwards	284 < 9.4 >	192 < 7.5 >	287 < 10.9 >	310 < 10.9 >	364 < 12.9 >	303 < 10.1 >	▲ 16.8
FX Option	91 < 3.0 >	58 < 2.3 >	76 < 2.9 >	66 < 2.3 >	57 < 2.0 >	59 < 1.9 >	+ 2.1
Total	3,025	2,542	2,636	2,846	2,826	3,005	+ 6.3

1/ There is a data gap between April 2011 and April 2012 due to an increase in the number of reporting financial institutions in April 2012 (the same shall apply hereinafter).

2/ Changes from the last survey in April 2012 (the same shall apply hereinafter).

<Table 2-1> Breakdown of Transactions by Type of Counterparty

(Daily averages in hundred millions of USD)

(Figures in parentheses represent percentage of total of each category)

	April 2008	April 2009	April 2010	April 2011	April 2012	October 2012	
							Changes
Financial Institutions <sup>1/</sup>	2,380 < 100.0 >	2,057 < 100.0 >	1,943 < 100.0 >	2,196 < 100.0 >	2,326 < 100.0 >	2,561 < 100.0 >	+ 10.1
Spot	791 < 33.2 >	511 < 24.8 >	686 < 35.3 >	786 < 35.8 >	800 < 34.4 >	727 < 28.4 >	▲ 9.1
FX Swap	1,439 < 60.5 >	1,455 < 70.7 >	1,090 < 56.1 >	1,216 < 55.4 >	1,232 < 53.0 >	1,542 < 60.2 >	+ 25.1
Forwards	80 < 3.4 >	49 < 2.4 >	109 < 5.6 >	141 < 6.4 >	250 < 10.7 >	247 < 9.6 >	▲ 1.2
FX Option	71 < 3.0 >	43 < 2.1 >	59 < 3.0 >	53 < 2.4 >	44 < 1.9 >	45 < 1.8 >	+ 3.0
Non-financial Institutions	644 < 100.0 >	485 < 100.0 >	693 < 100.0 >	650 < 100.0 >	500 < 100.0 >	444 < 100.0 >	▲ 11.2
Spot	263 < 40.8 >	191 < 39.4 >	279 < 40.3 >	276 < 42.4 >	199 < 39.9 >	176 < 39.6 >	▲ 11.7
FX Swap	157 < 24.4 >	135 < 27.8 >	218 < 31.5 >	191 < 29.5 >	173 < 34.7 >	199 < 44.8 >	+ 14.8
Forwards	203 < 31.6 >	143 < 29.5 >	178 < 25.7 >	169 < 26.0 >	114 < 22.7 >	56 < 12.5 >	▲ 51.1
FX Option	21 < 3.2 >	16 < 3.3 >	17 < 2.4 >	14 < 2.1 >	14 < 2.7 >	14 < 3.0 >	▲ 0.7

1/ Transactions with financial institutions are defined as transactions with reporting financial institutions and those with other financial institutions (central counterparties, regional banks, regional banks II, *shinkin* banks, credit cooperatives, labor banks and the Rokinren Bank, agricultural cooperatives, credit federations of agricultural cooperatives, fishery cooperatives, prefectural credit federations of fishery cooperatives, mutual funds, pension funds, hedge funds, MMFs, lease companies, insurance companies, finance companies, postal savings, government financial institutions such as the Japan Finance Corporation and the Development Bank of Japan, and central banks).

<Table 2-2> Breakdown of Transactions with Financial Institutions<sup>1/</sup>

	October 2012
Interbank Dealers	2,247 < 100.0 >
Spot	669 < 29.8 >
FX Swap	1,444 < 64.2 >
Forwards	96 < 4.3 >
FX Option	38 < 1.7 >
Other Financial Institutions	314 < 100.0 >
Spot	58 < 18.6 >
FX Swap	98 < 31.2 >
Forwards	151 < 48.0 >
FX Option	7 < 2.2 >

1/ Breakdown of transactions with financial institutions (transactions with interbank dealers and those with other financial institutions) is collected from the October 2012 survey.

<Table 3> Breakdown of Transactions by Location of Counterparty<sup>1/</sup>

(Daily averages in hundred millions of USD)

(Figures in parentheses represent percentage of total of each category)

	April 2008	April 2009	April 2010	April 2011	April 2012	October 2012	
							Changes
Local Transactions	866 < 100.0 >	699 < 100.0 >	826 < 100.0 >	911 < 100.0 >	1,001 < 100.0 >	1,046 < 100.0 >	+ 4.6
Spot	345 < 39.9 >	242 < 34.7 >	285 < 34.5 >	351 < 38.6 >	319 < 31.9 >	297 < 28.4 >	▲ 6.9
FX Swap	290 < 33.5 >	292 < 41.8 >	301 < 36.4 >	321 < 35.3 >	402 < 40.2 >	496 < 47.4 >	+ 23.2
Forwards	198 < 22.9 >	147 < 21.0 >	211 < 25.5 >	214 < 23.5 >	255 < 25.5 >	228 < 21.8 >	▲ 10.8
FX Option	33 < 3.8 >	18 < 2.5 >	30 < 3.6 >	25 < 2.7 >	24 < 2.4 >	26 < 2.4 >	+ 6.5
Cross-border Transactions	2,159 < 100.0 >	1,843 < 100.0 >	1,810 < 100.0 >	1,935 < 100.0 >	1,826 < 100.0 >	1,959 < 100.0 >	+ 7.3
Spot	708 < 32.8 >	460 < 25.0 >	680 < 37.6 >	710 < 36.7 >	681 < 37.3 >	606 < 30.9 >	▲ 10.9
FX Swap	1,307 < 60.5 >	1,297 < 70.4 >	1,008 < 55.7 >	1,086 < 56.1 >	1,003 < 54.9 >	1,245 < 63.5 >	+ 24.1
Forwards	86 < 4.0 >	45 < 2.4 >	77 < 4.2 >	96 < 5.0 >	109 < 5.9 >	75 < 3.8 >	▲ 31.1
FX Option	58 < 2.7 >	41 < 2.2 >	46 < 2.5 >	42 < 2.2 >	33 < 1.8 >	33 < 1.7 >	▲ 1.0

1/ From the 2010 survey, the reporting basis was changed from the trading-desk basis to the sales-desk basis. "Cross-border Transactions" denote transactions with non-residents.

<Table 4-1> Breakdown of Transactions by Execution Method

(Daily averages in hundred millions of USD)

(Figures in parentheses represent percentage of total of each category)

	April 2008	April 2009	April 2010	April 2011	April 2012	October 2012	
							Changes
Financial Institutions	2,380 < 100.0 >	2,057 < 100.0 >	1,943 < 100.0 >	2,196 < 100.0 >	2,326 < 100.0 >	2,561 < 100.0 >	+ 10.1
Electronic Trading	773 < 32.5 >	562 < 27.3 >	721 < 37.1 >	905 < 41.2 >	823 < 35.4 >	915 < 35.7 >	+ 11.2
Others	1,607 < 67.5 >	1,495 < 72.7 >	1,222 < 62.9 >	1,291 < 58.8 >	1,504 < 64.6 >	1,646 < 64.3 >	+ 9.5
Non-financial Institutions	644 < 100.0 >	485 < 100.0 >	693 < 100.0 >	650 < 100.0 >	500 < 100.0 >	444 < 100.0 >	▲ 11.2
Electronic Trading	226 < 35.1 >	129 < 26.6 >	243 < 35.1 >	319 < 49.1 >	258 < 51.5 >	293 < 66.0 >	+ 13.8
Others	418 < 64.9 >	356 < 73.4 >	449 < 64.9 >	331 < 50.9 >	242 < 48.5 >	151 < 34.0 >	▲ 37.7

<Table 4-2> Breakdown of Transactions with Financial Institutions<sup>1/</sup>

	October 2012
Interbank Dealers	2,246 < 100.0 >
Electronic Trading	819 < 36.5 >
Others	1,426 < 63.5 >
Other Financial Institutions	315 < 100.0 >
Electronic Trading	96 < 30.3 >
Others	220 < 69.7 >

1/ Breakdown of transactions with financial institutions (transactions with interbank dealers and those with other financial institutions) is collected from the October 2012 survey.

<Table 5> Breakdown of Transactions by Currency Pair

(Daily averages in hundred millions of USD)

(Figures in parentheses represent percentage of total of each pair)

	Against JPY						Against USD								Other Pairs		Total	
	USD	Changes	EUR	Changes	Others	Changes	EUR	Changes	GBP	Changes	AUD	Changes	Others	Changes	Changes	Changes		
Spot	414 <27.5>	▲ 11.9	109 <48.0>	+ 4.1	94 <30.4>	▲ 28.2	128 <30.5>	▲ 8.1	18 <15.0>	▲ 35.4	51 <33.1>	▲ 1.4	47 <24.7>	+ 8.0	42 <53.4>	+ 35.0	903 <30.1>	▲ 9.6
FX Swap	903 <60.1>	+ 19.9	60 <26.7>	+ 11.4	155 <50.0>	+ 24.6	278 <66.0>	+ 66.0	103 <83.1>	+ 54.8	93 <60.6>	+ 14.0	116 <61.0>	+ 1.7	33 <42.1>	▲ 26.1	1,741 <57.9>	+ 23.9
Forwards	156 <10.4>	▲ 20.9	49 <21.8>	+ 2.9	49 <15.7>	▲ 14.6	11 <2.7>	▲ 49.8	2 <1.5>	▲ 46.0	7 <4.6>	▲ 37.9	26 <13.5>	+ 23.6	3 <3.4>	▲ 21.2	303 <10.1>	▲ 16.8
FX Option	29 <2.0>	▲ 11.5	8 <3.5>	+ 4.1	12 <4.0>	+ 27.2	3 <0.8>	+ 2.8	1 <0.4>	+ 192.2	3 <1.8>	+ 34.6	2 <0.8>	+ 52.6	1 <1.2>	+ 93.4	59 <1.9>	+ 2.1
Total	1,503	+ 3.4	227	+ 5.7	310	▲ 3.8	421	+ 26.4	124	+ 25.4	154	+ 4.9	190	+ 6.0	78	▲ 1.3	3,005	+ 6.3

<Table 6> Transactions of Asian and Other Emerging Currencies<sup>1/</sup>

(Daily averages in hundred millions of USD)

	HKD	SGD	TWD	KRW	THB	IDR	INR	MYR	PHP	CNY <sup>2</sup>	BRL	RUB	ZAR
Spot	7.5	7.1	0.1	1.1	1.0	1.1	1.0	0.4	0.1	2.8 (1.8)	1.6	0.7	5.0
FX Swap	8.7	6.2	0.0	0.0	1.8	0.2	0.0	0.1	0.0	1.1 (0.1)	0.0	0.7	47.1
Forwards	0.8	2.8	0.6	3.1	0.6	3.1	3.7	1.0	0.4	2.4 (0.2)	3.9	3.0	1.5
of which: NDF	0.0	0.0	0.6	3.0	0.0	3.1	3.7	0.7	0.4	1.9 (0.0)	3.8	2.2	0.0
Total	17.0	16.0	0.7	4.2	3.4	4.3	4.7	1.5	0.4	6.3 (2.1)	5.5	4.3	53.6

Last survey's data 16.7 12.5 0.8 3.5 3.8 1.3 3.3 1.3 0.4 2.9 6.4 0.7 34.9

1/ HKD: Hong Kong dollar, SGD: Singapore dollar, TWD: new Taiwan dollar, KRW: Korean won, THB: Thai baht, IDR: Indonesian rupiah, INR: Indian rupee, MYR: Malaysian ringgit, PHP: Philippine peso, CNY: Chinese yuan, BRL: Brazilian real, RUB: Russian ruble, ZAR: South African rand.

2/ Figures in parentheses represent transactions of CNY-JPY.

<Table 7> Foreign Exchange Volume Market Share

(Percentage, Percentage points)

	First Quartile (8 Institutions)	Second Quartile (8 Institutions)	Third Quartile (8 Institutions)	Last Quartile (8 Institutions)
Spot	78.3	16.3	4.3	1.1
Changes	(+ 6.8)	(▲ 5.8)	(▲ 0.9)	(▲ 0.2)
FX Swap	78.2	17.9	3.0	0.9
Changes	(+ 1.4)	(▲ 0.4)	(▲ 0.9)	(▲ 0.0)
Forwards	77.3	15.9	5.8	1.0
Changes	(+ 3.4)	(▲ 3.0)	(▲ 0.6)	(+ 0.2)
FX Option	79.8	15.6	4.5	0.0
Changes	(+ 11.5)	(▲ 9.3)	(▲ 2.3)	(▲ 0.0)
Total	75.8	18.9	3.5	1.8
Changes	(+ 4.8)	(▲ 3.2)	(▲ 1.6)	(+ 0.1)

(Type of Counterparty)

(Percentage, Percentage points)

	First Quartile (8 Institutions)	Second Quartile (8 Institutions)	Third Quartile (8 Institutions)	Last Quartile (8 Institutions)
Financial Institutions	77.3	17.6	3.5	1.6
Changes	(+ 1.6)	(▲ 0.5)	(▲ 1.3)	(+ 0.1)
Non-financial Institutions	89.0	7.5	3.1	0.4
Changes	(+ 5.6)	(▲ 4.6)	(▲ 0.7)	(▲ 0.3)

(Currency Pair)

(Percentage, Percentage points)

	First Quartile (8 Institutions)	Second Quartile (8 Institutions)	Third Quartile (8 Institutions)	Last Quartile (8 Institutions)
Against JPY (Total)	76.3	17.8	4.2	1.7
Changes	(+ 5.1)	(▲ 3.2)	(▲ 1.6)	(▲ 0.3)
Against JPY (USD)	76.5	18.1	4.3	1.1
Changes	(+ 5.2)	(▲ 3.2)	(▲ 1.4)	(▲ 0.6)

<Table 1> Turnover by Instrument, Counterparty, and Currency

(In millions of USD)

	JPY against			USD against				Others	Total
	USD	EUR	Others	EUR	GBP	AUD	Others		
<b>Spot</b>									
With Reporting Dealers (Local)	54,977	6,943	7,824	10,344	1,679	7,960	4,349	1,557	95,633
With Other Interbank Dealers	627,896	118,743	98,521	222,459	35,957	95,320	93,412	83,762	1,376,070
Local	34,819	6,533	10,187	3,960	344	5,807	1,385	671	63,706
Cross-border	593,077	112,210	88,334	218,499	35,613	89,513	92,027	83,091	1,312,364
With Other Financial Customers	58,366	23,818	29,953	6,400	774	3,897	3,089	1,912	128,209
Local	53,034	21,283	28,128	1,575	393	2,362	1,593	838	109,206
Cross-border	5,332	2,535	1,825	4,825	381	1,535	1,496	1,074	19,003
With Non-financial Customers	169,399	89,949	71,427	43,395	2,220	4,756	2,237	4,167	387,550
Local	168,534	89,659	71,289	43,085	2,201	4,458	2,055	3,893	385,174
Cross-border	865	290	138	310	19	298	182	274	2,376
<b>Total</b>	<b>910,638</b>	<b>239,453</b>	<b>207,725</b>	<b>282,598</b>	<b>40,630</b>	<b>111,933</b>	<b>103,087</b>	<b>91,398</b>	<b>1,987,462</b>
<b>FX Swap</b>									
With Reporting Dealers (Local)	244,156	4,336	2,944	39,233	9,743	18,308	18,365	816	337,901
With Other Interbank Dealers	1,435,659	49,396	139,125	544,977	211,147	170,074	223,290	64,283	2,837,951
Local	68,936	12,117	29,021	2,821	649	9,359	6,862	1,328	131,093
Cross-border	1,366,723	37,279	110,104	542,156	210,498	160,715	216,428	62,955	2,706,858
With Other Financial Customers	122,122	16,453	62,878	4,479	847	1,890	4,900	2,343	215,912
Local	97,635	15,905	61,471	3,649	473	1,422	1,625	2,250	184,430
Cross-border	24,487	548	1,407	830	374	468	3,275	93	31,482
With Non-financial Customers	185,040	62,783	135,958	22,370	4,194	14,539	8,679	4,546	438,109
Local	184,763	62,759	135,913	22,344	4,167	14,480	8,601	4,546	437,573
Cross-border	277	24	45	26	27	59	78	0	536
<b>Total</b>	<b>1,986,977</b>	<b>132,968</b>	<b>340,905</b>	<b>611,059</b>	<b>225,931</b>	<b>204,811</b>	<b>255,234</b>	<b>71,988</b>	<b>3,829,873</b>
<b>Forwards</b>									
With Reporting Dealers (Local)	2,619	1,385	1,473	103	290	54	1,839	124	7,887
With Other Interbank Dealers	72,752	30,023	33,359	13,060	2,732	8,891	40,683	2,457	203,957
Local	28,058	10,965	14,559	2,124	244	2,870	2,550	548	61,918
Cross-border	44,694	19,058	18,800	10,936	2,488	6,021	38,133	1,909	142,039
With Other Financial Customers	186,138	62,762	57,748	4,099	676	5,877	11,651	2,514	331,465
Local	177,030	62,493	56,705	4,038	660	5,846	5,029	704	312,505
Cross-border	9,108	269	1,043	61	16	31	6,622	1,810	18,960
With Non-financial Customers	82,173	14,329	14,245	7,708	327	588	2,250	660	122,280
Local	78,864	14,170	14,203	7,707	295	588	2,197	656	118,680
Cross-border	3,309	159	42	1	32	0	53	4	3,600
<b>Total</b>	<b>343,682</b>	<b>108,499</b>	<b>106,825</b>	<b>24,970</b>	<b>4,025</b>	<b>15,410</b>	<b>56,423</b>	<b>5,755</b>	<b>665,589</b>
<b>FX Option</b>									
With Reporting Dealers (Local)	1,579	263	409	297	40	436	0	34	3,058
With Other Interbank Dealers	38,144	10,458	14,638	6,622	1,116	5,270	2,863	1,500	80,611
Local	4,467	3,930	3,163	0	0	0	0	2	11,562
Cross-border	33,677	6,528	11,475	6,622	1,116	5,270	2,863	1,498	69,049
With Other Financial Customers	3,582	2,790	8,705	1	0	51	230	143	15,502
Local	3,479	2,790	7,048	0	0	9	229	8	13,563
Cross-border	103	0	1,657	1	0	42	1	135	1,939
With Non-financial Customers	21,441	4,020	3,255	197	1	271	270	310	29,765
Local	21,265	2,620	3,255	171	1	271	244	310	28,137
Cross-border	176	1,400	0	26	0	0	26	0	1,628
<b>Total</b>	<b>64,746</b>	<b>17,531</b>	<b>27,007</b>	<b>7,117</b>	<b>1,157</b>	<b>6,028</b>	<b>3,363</b>	<b>1,987</b>	<b>128,936</b>

1. Turnover in nominal or notional principal amounts in October 2012.
2. Reporting dealers refer to financial institutions which are the respondents to this survey.
3. Other interbank dealers refer to interbank dealers other than reporting dealers.
4. Other financial customers refer to financial institutions other than reporting dealers and other interbank dealers (central counterparties, regional banks, regional banks II, *shinkin* banks, credit cooperatives, labor banks and the Rokinren Bank, agricultural cooperatives, credit federations of agricultural cooperatives, fishery cooperatives, prefectural credit federations of fishery cooperatives, mutual funds, pension funds, hedge funds, MMFs, lease companies, insurance companies, finance companies, postal savings, government financial institutions such as the Japan Finance Corporation and the Development Bank of Japan, and central banks).
5. Transactions with retail margin broker firms are included in “with non-financial customers.”
6. Geographical distinction between “local” and “cross-border” is based on the location of the sales desk of a counterparty. Any transactions with overseas branches or subsidiaries are included in “cross-border.”
7. Spot: Single outright transaction involving the exchange of two currencies at a rate agreed on the date of the contract for value or delivery within two business days. A leg of FX swap transactions is excluded.  
FX Swap: Contract which commits two counterparties to exchange streams of interest payments in different currencies for an agreed periods of time and to change principal amounts in different currencies at a pre-agreed exchange rate at maturity. A leg of spot transactions is excluded.  
Forwards: Transaction involving the exchange of two currencies at a rate agreed on the date of the contract for value or delivery at some time in the future (more than two business days later). Foreign exchange agreement transactions are included.  
FX Option: Option contract that gives the right to buy or sell a currency with another currency at a specified exchange rate during a specified period.
8. Non-dollar amounts should be converted into USD using exchange rates prevailing on the transaction date. If this is impractical or impossible, data may be reported using average or end-of-period exchange rates.
9. In millions of USD. Data should be rounded to the nearest million USD.

&lt;Table 2&gt; Turnover by Execution Method

(In millions of USD)

	JPY against			USD against				Others	Total
	USD	EUR	Others	EUR	GBP	AUD	Others		
<b>Spot</b>									
With Reporting Dealers (Local)	54,977	6,943	7,824	10,357	1,680	7,965	4,350	1,556	95,652
Electronic Trading	31,994	3,434	2,265	5,826	841	5,120	2,327	792	52,599
Others	22,983	3,509	5,559	4,531	839	2,845	2,023	764	43,053
With Other Interbank Dealers	627,279	118,728	98,291	222,400	35,957	95,254	93,407	83,755	1,375,071
Electronic Trading	210,651	70,389	48,912	141,552	20,903	71,829	36,195	22,216	622,647
Others	416,628	48,339	49,379	80,848	15,054	23,425	57,212	61,539	752,424
With Other Financial Customers	58,984	23,835	30,183	6,433	773	3,951	3,090	1,923	129,172
Electronic Trading	11,216	12,833	13,318	5,248	449	1,851	1,372	1,660	47,947
Others	47,768	11,002	16,865	1,185	324	2,100	1,718	263	81,225
With Non-financial Customers	169,398	89,949	71,426	43,395	2,220	4,755	2,239	4,168	387,550
Electronic Trading	72,369	80,086	60,039	32,362	2,047	4,227	995	3,513	255,638
Others	97,029	9,863	11,387	11,033	173	528	1,244	655	131,912
<b>Total</b>	<b>910,638</b>	<b>239,455</b>	<b>207,724</b>	<b>282,585</b>	<b>40,630</b>	<b>111,925</b>	<b>103,086</b>	<b>91,402</b>	<b>1,987,445</b>
<b>FX Swap</b>									
With Reporting Dealers (Local)	244,132	4,336	2,957	39,234	9,743	18,308	18,365	816	337,891
Electronic Trading	67,456	2,519	1,804	12,018	4,883	5,325	4,790	205	99,000
Others	176,676	1,817	1,153	27,216	4,860	12,983	13,575	611	238,891
With Other Interbank Dealers	1,435,143	48,610	139,099	544,975	211,148	170,074	223,291	64,283	2,836,623
Electronic Trading	344,408	17,361	39,918	286,164	82,186	47,272	83,545	59,500	960,354
Others	1,090,735	31,249	99,181	258,811	128,962	122,802	139,746	4,783	1,876,269
With Other Financial Customers	122,687	17,241	62,879	4,479	846	1,890	4,900	2,343	217,265
Electronic Trading	47,572	3,895	44,400	1,975	712	491	2,252	1,723	103,020
Others	75,115	13,346	18,479	2,504	134	1,399	2,648	620	114,245
With Non-financial Customers	185,039	62,782	135,959	22,370	4,194	14,539	8,679	4,546	438,108
Electronic Trading	141,816	59,076	120,072	16,403	3,738	12,340	4,483	3,740	361,668
Others	43,223	3,706	15,887	5,967	456	2,199	4,196	806	76,440
<b>Total</b>	<b>1,987,001</b>	<b>132,969</b>	<b>340,894</b>	<b>611,058</b>	<b>225,931</b>	<b>204,811</b>	<b>255,235</b>	<b>71,988</b>	<b>3,829,887</b>
<b>Forwards</b>									
With Reporting Dealers (Local)	2,615	1,385	1,472	103	290	55	1,802	112	7,834
Electronic Trading	1,504	1,101	820	64	8	18	102	68	3,685
Others	1,111	284	652	39	282	37	1,700	44	4,149
With Other Interbank Dealers	72,753	30,022	33,356	13,060	2,732	8,891	40,683	2,457	203,954
Electronic Trading	25,965	9,294	10,575	3,325	434	3,378	8,308	1,317	62,596
Others	46,788	20,728	22,781	9,735	2,298	5,513	32,375	1,140	141,358
With Other Financial Customers	186,149	62,763	57,748	4,099	676	5,877	11,727	2,540	331,579
Electronic Trading	28,451	9,940	10,444	2,101	557	1,786	3,269	2,234	58,782
Others	157,698	52,823	47,304	1,998	119	4,091	8,458	306	272,797
With Non-financial Customers	82,175	14,330	14,244	7,707	327	588	2,250	659	122,280
Electronic Trading	8,924	7,499	4,938	5,299	290	554	158	257	27,919
Others	73,251	6,831	9,306	2,408	37	34	2,092	402	94,361
<b>Total</b>	<b>343,692</b>	<b>108,500</b>	<b>106,820</b>	<b>24,969</b>	<b>4,025</b>	<b>15,411</b>	<b>56,462</b>	<b>5,768</b>	<b>665,647</b>
<b>FX Option</b>									
With Reporting Dealers (Local)	1,579	263	409	297	40	436	0	34	3,058
Electronic Trading	2	0	10	55	0	5	0	0	72
Others	1,577	263	399	242	40	431	0	34	2,986
With Other Interbank Dealers	38,144	10,458	14,638	6,623	1,116	5,270	2,863	1,500	80,612
Electronic Trading	376	194	449	240	0	678	12	0	1,949
Others	37,768	10,264	14,189	6,383	1,116	4,592	2,851	1,500	78,663
With Other Financial Customers	3,582	2,790	8,704	1	0	51	230	143	15,501
Electronic Trading	9	8	413	0	0	0	0	4	434
Others	3,573	2,782	8,291	1	0	51	230	139	15,067
With Non-financial Customers	21,441	4,020	3,255	197	1	271	270	310	29,765
Electronic Trading	26	1	3	0	0	8	0	1	39
Others	21,415	4,019	3,252	197	1	263	270	309	29,726
<b>Total</b>	<b>64,746</b>	<b>17,531</b>	<b>27,006</b>	<b>7,118</b>	<b>1,157</b>	<b>6,028</b>	<b>3,363</b>	<b>1,987</b>	<b>128,936</b>

1. Electronic trading refers to transactions through electronic broking or electronic trading systems.



<Table 3> Turnover by Currencies of Asia and Other Emerging Economies

(In millions of USD)

	HKD	SGD	TWD	KRW	THB	IDR	INR	MYR	PHP	CNY		BRL	RUB	ZAR	Total
											CNY-JPY				
<b>Spot</b>															
With Reporting Dealers (Local)	333	518	12	48	109	0	116	19	1	3,095	3,004	11	47	208	4,517
With Other Interbank Dealers	15,361	13,327	68	1,810	1,331	2,327	1,934	516	105	2,487	623	2,781	1,311	6,493	49,851
Local	811	161	0	0	47	0	0	0	0	175	166	432	23	277	1,926
Cross-border	14,550	13,166	68	1,810	1,284	2,327	1,934	516	105	2,312	457	2,349	1,288	6,216	47,925
With Other Financial Customers	627	884	28	181	219	79	38	216	14	77	64	758	44	2,119	5,284
Local	548	284	28	113	128	12	38	211	14	76	64	0	42	2,102	3,596
Cross-border	79	600	0	68	91	67	0	5	0	1	0	758	2	17	1,688
With Non-financial Customers	235	794	37	322	532	7	70	202	2	395	349	4	115	2,188	4,903
Local	226	748	37	322	528	7	70	202	2	395	349	4	110	2,149	4,800
Cross-border	9	46	0	0	4	0	0	0	0	0	0	0	5	39	103
<b>Total</b>	<b>16,556</b>	<b>15,523</b>	<b>145</b>	<b>2,361</b>	<b>2,191</b>	<b>2,413</b>	<b>2,158</b>	<b>953</b>	<b>122</b>	<b>6,054</b>	<b>4,040</b>	<b>3,554</b>	<b>1,517</b>	<b>11,008</b>	<b>64,555</b>
<b>FX Swap</b>															
With Reporting Dealers (Local)	800	2,147	0	23	233	0	0	5	0	406	0	0	60	1,452	5,126
With Other Interbank Dealers	17,570	10,655	0	3	3,550	335	7	43	0	1,953	68	0	1,310	65,896	101,322
Local	817	177	0	0	34	0	0	0	0	26	26	0	0	5,790	6,844
Cross-border	16,753	10,478	0	3	3,516	335	7	43	0	1,927	42	0	1,310	60,106	94,478
With Other Financial Customers	242	514	0	1	28	0	10	75	0	52	52	0	4	9,696	10,622
Local	237	82	0	1	5	0	10	75	0	52	52	0	0	9,554	10,016
Cross-border	5	432	0	0	23	0	0	0	0	0	0	0	4	142	606
With Non-financial Customers	505	287	0	2	227	0	0	0	0	74	55	0	84	26,503	27,682
Local	505	285	0	2	227	0	0	0	0	74	55	0	84	26,503	27,680
Cross-border	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
<b>Total</b>	<b>19,117</b>	<b>13,603</b>	<b>0</b>	<b>29</b>	<b>4,038</b>	<b>335</b>	<b>17</b>	<b>123</b>	<b>0</b>	<b>2,485</b>	<b>175</b>	<b>0</b>	<b>1,458</b>	<b>103,547</b>	<b>144,752</b>
<b>Forwards</b>															
With Reporting Dealers (Local)	220	151	116	536	1	16	447	9	30	438	129	43	120	22	2,149
With Other Interbank Dealers	760	2,024	1,184	5,222	483	5,154	4,997	1,222	745	3,818	30	7,019	4,569	1,765	38,962
Local	216	115	36	95	8	36	30	74	17	8	0	773	0	654	2,062
Cross-border	544	1,909	1,148	5,127	475	5,118	4,967	1,148	728	3,810	30	6,246	4,569	1,111	36,900
With Other Financial Customers	599	1,408	23	549	492	1,461	2,591	535	32	808	78	1,319	526	1,149	11,492
Local	594	804	19	390	196	243	292	462	22	597	77	131	108	1,142	5,000
Cross-border	5	604	4	159	296	1,218	2,299	73	10	211	1	1,188	418	7	6,492
With Non-financial Customers	181	2,488	90	493	374	80	174	382	6	224	199	131	1,331	389	6,343
Local	157	2,467	90	493	368	80	174	382	6	224	199	131	1,331	387	6,290
Cross-border	24	21	0	0	6	0	0	0	0	0	0	0	0	2	53
<b>Total</b>	<b>1,760</b>	<b>6,071</b>	<b>1,413</b>	<b>6,800</b>	<b>1,350</b>	<b>6,711</b>	<b>8,209</b>	<b>2,148</b>	<b>813</b>	<b>5,288</b>	<b>436</b>	<b>8,512</b>	<b>6,546</b>	<b>3,325</b>	<b>58,946</b>
<b>Non-deliverable Forwards (as part of Forwards)</b>															
With Reporting Dealers (Local)	0	0	106	521	0	16	447	9	30	214	1	43	119	0	1,505
With Other Interbank Dealers	0	0	1,182	5,201	0	5,154	4,995	925	740	3,208	10	7,019	4,286	0	32,710
Local	0	0	35	95	0	36	30	67	17	6	0	773	0	0	1,059
Cross-border	0	0	1,147	5,106	0	5,118	4,965	858	723	3,202	10	6,246	4,286	0	31,651
With Other Financial Customers	0	0	7	351	0	1,461	2,576	243	30	728	10	1,319	472	0	7,187
Local	0	0	3	192	0	243	277	170	20	517	9	131	65	0	1,618
Cross-border	0	0	4	159	0	1,218	2,299	73	10	211	1	1,188	407	0	5,569
With Non-financial Customers	0	0	57	597	0	80	172	372	5	26	16	53	5	0	1,367
Local	0	0	57	597	0	80	172	372	5	26	16	53	5	0	1,367
Cross-border	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>1,352</b>	<b>6,670</b>	<b>0</b>	<b>6,711</b>	<b>8,190</b>	<b>1,549</b>	<b>805</b>	<b>4,176</b>	<b>37</b>	<b>8,434</b>	<b>4,882</b>	<b>0</b>	<b>42,769</b>

1. Turnover in nominal or notional principal amounts in October 2012.