

# *Tokyo Foreign Exchange Market Committee*

July 27, 2009

## **Results of Turnover Survey of Tokyo FX Market**

Tokyo Foreign Exchange Market Committee (TFEMC) today released the results of its **Turnover Survey of Tokyo FX Market (Tokyo FX Survey)**. This is the fourth annual survey covering foreign exchange transactions in the Tokyo market in April 2009.

The failure of Lehman Brothers in September 2008 accelerated the deterioration in financial market conditions, leading to a global financial crisis. This has had a significant impact on the Tokyo foreign exchange market.

The TFEMC conducted this survey in order to provide the updated picture of the Tokyo foreign exchange market on both accurate and timely manner for the better understanding of recent trends by market participants; thereby contributing to sound growth of the market. The TFEMC will continue Tokyo FX Survey in the future on an annual basis.

To achieve a representative survey, the TFEMC invited 21 leading financial institutions active in the Tokyo foreign exchange market (as listed below). In conducting this survey, Financial Markets Department of the Bank of Japan provided technical assistances in collecting and processing the data of respective respondents.

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<Annex>

While the data released here is similar in nature to that collected by the BIS Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activities (BIS Survey), they are not directly comparable with each other due to differences in the reporting methodology. The basis of reporting for Tokyo FX Survey is the location of the price-setting dealer. However, for the 2007 BIS Survey, basis of reporting was the location of the sales desk of the trade. Similar surveys have been conducted for major international trading centers by respective regional foreign exchange committees, and their most recent results are released.

### Reporting Financial Institutions

Bank of America, N.A.  
The Bank of Tokyo-Mitsubishi UFJ, Ltd.  
Barclays Bank PLC, Tokyo Branch  
BNP Paribas Bank, Tokyo Branch  
Calyon  
The Chuo Mitsui Trust and Banking Co. Ltd.  
Citibank Japan Ltd.  
Deutsche Securities Inc.  
Goldman Sachs (Japan) Ltd.  
JPMorgan Chase Bank, N.A.  
Merrill Lynch Japan Securities Co., Ltd.  
Mitsubishi UFJ Trust and Banking Corporation  
Mizuho Bank, Ltd.  
Mizuho Corporate Bank, Ltd.  
Nomura Securities Co., Ltd.  
The Royal Bank of Scotland, Tokyo Branch  
Societe General, Tokyo Branch  
State Street Bank and Trust Company, Tokyo Branch  
Sumitomo Mitsui Banking Corporation  
The Sumitomo Trust & Banking Co., Ltd.  
UBS AG, Tokyo Branch

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<Table 1> Aggregate Turnover

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

	April, 2006	April, 2007	April, 2008	April, 2009	
					Changes
Spot	660 < 32.8 >	933 < 38.8 >	1,053 < 34.8 >	702 < 27.6 >	▲ 33.3
FX Swap	1,008 < 50.0 >	1,159 < 48.2 >	1,596 < 52.8 >	1,589 < 62.5 >	▲ 0.5
Forwards	273 < 13.5 >	220 < 9.2 >	284 < 9.4 >	192 < 7.5 >	▲ 32.4
FX Option	75 < 3.7 >	91 < 3.8 >	91 < 3.0 >	58 < 2.3 >	▲ 35.8
Total	2,016	2,403	3,025	2,542	▲ 16.0

< Table 2 > 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, 2006	April, 2007	April, 2008	April, 2009	
					Changes
Inter-dealer Transactions (*1)	1,461 < 100.0 >	1,950 < 100.0 >	2,380 < 100.0 >	2,057 < 100.0 >	▲13.6
Spot	495 < 33.9 >	811 < 41.6 >	791 < 33.2 >	511 < 24.8 >	▲35.3
FX Swap	842 < 57.7 >	958 < 49.1 >	1,439 < 60.5 >	1,455 < 70.7 >	+ 1.1
Forwards	71 < 4.9 >	110 < 5.6 >	80 < 3.4 >	49 < 2.4 >	▲39.3
FX Option	53 < 3.6 >	71 < 3.7 >	71 < 3.0 >	43 < 2.1 >	▲39.7
Customer Transactions (*2)	555 < 100.0 >	454 < 100.0 >	644 < 100.0 >	485 < 100.0 >	▲24.7
Spot	166 < 29.8 >	121 < 26.8 >	263 < 40.8 >	191 < 39.4 >	▲27.2
FX Swap	165 < 29.8 >	201 < 44.4 >	157 < 24.4 >	135 < 27.8 >	▲14.5
Forwards	202 < 36.4 >	110 < 24.4 >	203 < 31.6 >	143 < 29.5 >	▲29.7
FX Option	22 < 4.0 >	20 < 4.4 >	21 < 3.2 >	16 < 3.3 >	▲22.5

\*1 "Inter-dealer Transactions" denote transactions between interbank dealers. Interbank dealers refers to financial institutions which are participating in interbank market and are treated as such by the respondent.

\*2 "Customer Transactions" denote transactions other than "Inter-dealer Transactions".

<Table 3> Breakdown of Transactions by Location of Counterparty

(Daily averages in hundred millions of USD)

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

	April, 2006	April, 2007	April, 2008	April, 2009	
					Changes
Local Transactions (*)	740 < 100.0 >	732 < 100.0 >	866 < 100.0 >	699 < 100.0 >	▲ 19.2
Spot	206 < 27.8 >	201 < 27.5 >	345 < 39.9 >	242 < 34.7 >	▲ 29.7
FX Swap	315 < 42.6 >	386 < 52.7 >	290 < 33.5 >	292 < 41.8 >	+ 0.7
Forwards	197 < 26.6 >	115 < 15.7 >	198 < 22.9 >	147 < 21.0 >	▲ 25.7
FX Option	22 < 3.0 >	30 < 4.1 >	33 < 3.8 >	18 < 2.5 >	▲ 45.9
Cross-border Transactions (*)	1,276 < 100.0 >	1,671 < 100.0 >	2,159 < 100.0 >	1,843 < 100.0 >	▲ 14.6
Spot	455 < 35.6 >	732 < 43.8 >	708 < 32.8 >	460 < 25.0 >	▲ 35.1
FX Swap	692 < 54.2 >	773 < 46.3 >	1,307 < 60.5 >	1,297 < 70.4 >	▲ 0.7
Forwards	76 < 6.0 >	105 < 6.3 >	86 < 4.0 >	45 < 2.4 >	▲ 47.8
FX Option	53 < 4.1 >	61 < 3.7 >	58 < 2.7 >	41 < 2.2 >	▲ 30.2

\* "Local Transactions" denote transactions between reporting financial institutions and residents. "Cross-border Transactions" denote transactions with non-residents.

< Table 4 > Breakdown of Transaction 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	384 < 24.3 >	▲30.2	81 < 48.0 >	▲11.9	52 < 43.8 >	▲51.7	95 < 39.9 >	▲29.7	18 < 32.2 >	▲55.1	23 < 12.1 >	▲18.2	23 < 16.2 >	▲62.6	26 < 52.3 >	▲31.9	702 < 27.6 >	▲33.3
FX Swap	1,048 < 66.3 >	+ 19.3	37 < 21.7 >	+ 15.2	42 < 34.8 >	+ 19.5	135 < 56.4 >	▲18.9	36 < 64.3 >	▲51.7	161 < 85.1 >	▲15.4	110 < 79.1 >	▲40.4	20 < 41.3 >	▲41.4	1,589 < 62.5 >	▲ 0.5
Forwards	105 < 6.6 >	▲24.8	46 < 27.1 >	+ 7.4	23 < 19.2 >	▲54.2	5 < 1.9 >	▲54.4	1 < 1.7 >	▲45.9	5 < 2.5 >	+ 29.9	6 < 4.5 >	▲80.8	1 < 3.0 >	▲54.2	192 < 7.5 >	▲32.4
FX Option	43 < 2.7 >	▲26.5	5 < 3.2 >	▲42.8	3 < 2.1 >	▲43.4	4 < 1.8 >	+ 30.6	1 < 1.8 >	+ 115.4	0 < 0.2 >	▲66.5	0 < 0.2 >	▲98.3	2 < 3.4 >	+ 34.9	58 < 2.3 >	▲35.8
Total	1,581	▲ 2.9	168	▲ 4.0	119	▲39.6	240	▲24.2	56	▲52.1	189	▲15.3	139	▲52.0	49	▲36.0	2,542	▲16.0

\* USD: US dollar, EUR: Euro, GBP: Pound sterling, AUD: Australian dollar

< Table 5 > Breakdown of Transactions by Methods of Execution

(Daily averages in hundred millions of USD)

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

	April, 2006	April, 2007	April, 2008	April, 2009	
					Changes
Inter-dealer Transactions	1,461 < 100.0 >	1,950 < 100.0 >	2,380 < 100.0 >	2,057 < 100.0 >	▲13.6
Voice Broker	339 < 23.2 >	449 < 23.0 >	589 < 24.7 >	636 < 30.9 >	+ 8.1
Electronic Broking Systems (EBS, Reuters Matching)	280 < 19.2 >	332 < 17.0 >	394 < 16.6 >	338 < 16.4 >	▲14.2
Electronic Trading Systems (*)	34 < 2.3 >	409 < 21.0 >	379 < 15.9 >	224 < 10.9 >	▲40.9
Residual (Interbank Direct by Telephone or Reuters Conversation)	808 < 55.3 >	760 < 39.0 >	1,019 < 42.8 >	859 < 41.7 >	▲15.7
Customer Transactions	555 < 100.0 >	454 < 100.0 >	644 < 100.0 >	485 < 100.0 >	▲24.7
Electronic Trading Systems (*)	95 < 17.1 >	140 < 30.9 >	226 < 35.1 >	129 < 26.6 >	▲43.0
Residual (by Telephone)	460 < 82.9 >	313 < 69.1 >	418 < 64.9 >	356 < 73.4 >	▲14.9

\* Electronic Trading System refers to single-bank and multi-bank trading platforms of e-commerce (e.g., FXAll, FXConnect, Currenex).

<Table 6> Transactions of Asian and Other Emerging Currencies

(Daily averages in hundred millions of USD)

April, 2009	HKD	SGD	TWD	KRW	THB	IDR	INR	MYR	PHP	CNY	BRL	RUB	ZAR
Spot	5.2	2.9	0.4	0.8	0.5	0.0	0.1	0.1	0.0	0.1	0.2	0.1	3.8
FX Swap	35.2	14.1	0.0	0.0	3.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	8.9
Forwards	0.5	0.4	0.3	1.9	0.2	0.1	0.2	0.2	0.1	0.8	0.2	0.0	0.8
of which NDF	0.0	0.0	0.3	1.7	0.0	0.1	0.1	0.2	0.1	0.8	0.1	0.0	0.0
Total	40.9	17.5	0.7	2.6	4.3	0.2	0.2	0.3	0.2	0.9	0.4	0.2	13.4

\* 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

< Table 7 > Foreign Exchange Volume Market Share

(Percentage, Percentage Pts.)

	First Quartile (5 Institutions)	Second Quartile (5 Institutions)	Third Quartile (5 Institutions)	Last Quartile (6 Institutions)
Spot	65.1	27.1	5.2	2.7
Changes	(▲ 0.6)	(+ 0.8)	(▲ 0.8)	(+ 0.6)
FX Swap	68.6	22.3	6.9	2.2
Changes	(+ 4.7)	(▲ 2.3)	(▲ 3.7)	(+ 1.3)
Forwards	63.5	20.9	10.5	5.1
Changes	(+ 4.1)	(▲ 9.3)	(+ 2.4)	(+ 2.7)
FX Option	72.4	23.3	4.3	0.0
Changes	(▲ 2.4)	(+ 2.6)	(+ 0.1)	(▲ 0.3)
Total	63.5	25.8	7.3	3.4
Changes	(+ 4.7)	(▲ 2.8)	(▲ 3.1)	(+ 1.2)

(Type of Counterparty)

(Percentage, Percentage Pts.)

	First Quartile ( 5 Institutions )	Second Quartile ( 5 Institutions )	Third Quartile ( 5 Institutions )	Last Quartile ( 6 Institutions )
Inter-dealer Transactions	67.2	22.7	6.9	3.1
Changes	(+ 5.0)	(▲ 3.0)	(▲ 3.3)	(+ 1.2)
Customer Transactions	60.4	29.0	7.2	3.4
Changes	(▲ 0.8)	(▲ 1.8)	(+ 0.9)	(+ 1.8)

(Currency Pair)

(Percentage, Percentage Pts.)

	First Quartile ( 5 Institutions )	Second Quartile ( 5 Institutions )	Third Quartile ( 5 Institutions )	Last Quartile ( 6 Institutions )
Against JPY (Total)	64.6	23.0	8.2	4.1
Changes	(+ 7.3)	(▲ 6.9)	(▲ 1.8)	(+ 1.4)
Against JPY (USD)	68.8	21.0	7.4	2.8
Changes	(+ 10.5)	(▲ 7.7)	(▲ 3.0)	(+ 0.2)

(ANNEX) Aggregated Reported Turnover in April 2009

< Table 1 > Turnover by Instrument, Counterparty and Currency

(In millions of USD)

	JPY against			USD against				Residual	Grand Total
	USD	EUR	Other	EUR	GBP	AUD	Other		
<b>Spot Transaction</b>									
With Interbank Dealers	610,878	112,675	60,289	151,974	29,819	26,087	35,770	45,939	1,073,431
Local	119,519	30,320	20,802	31,030	3,991	3,303	1,677	1,298	211,940
Cross-Border	491,359	82,355	39,487	120,944	25,828	22,784	34,093	44,641	861,491
With Other Financial Institutions or Non-Financial Customers	196,272	57,083	49,515	48,541	8,337	22,086	11,801	7,915	401,550
Local	166,552	48,381	40,978	18,869	1,549	15,190	4,764	824	297,107
Cross-Border	29,720	8,702	8,537	29,672	6,788	6,896	7,037	7,091	104,443
<b>Total</b>	<b>807,150</b>	<b>169,758</b>	<b>109,804</b>	<b>200,515</b>	<b>38,156</b>	<b>48,173</b>	<b>47,571</b>	<b>53,854</b>	<b>1,474,981</b>
<b>Foreign Exchange Swaps</b>									
With Interbank Dealers	2,042,845	44,992	42,342	268,957	69,041	325,910	220,292	40,318	3,054,697
Local	373,586	9,811	23,277	23,213	1,922	7,085	9,508	2,451	450,853
Cross-Border	1,669,259	35,181	19,065	245,744	67,119	318,825	210,784	37,867	2,603,844
With Other Financial Institutions or Non-Financial Customers	158,293	31,734	44,944	14,995	7,195	11,926	11,403	2,182	282,672
Local	80,070	30,806	41,650	5,328	636	713	2,776	215	162,194
Cross-Border	78,223	928	3,294	9,667	6,559	11,213	8,627	1,967	120,478
< Maturities >	2,201,138	76,726	87,284	283,951	76,236	337,838	231,697	42,500	3,337,370
Seven Days or Less	1,800,042	23,501	72,598	220,256	62,649	328,088	215,101	40,844	2,763,079
Over Seven Days and up to One Year	388,480	52,421	13,602	63,143	13,517	9,536	16,555	1,656	558,910
Over One Year	12,616	804	1,084	552	70	214	41	0	15,381
<b>Total</b>	<b>2,201,138</b>	<b>76,726</b>	<b>87,286</b>	<b>283,952</b>	<b>76,236</b>	<b>337,836</b>	<b>231,695</b>	<b>42,500</b>	<b>3,337,369</b>
<b>Outright Forwards</b>									
With Interbank Dealers	43,757	26,174	14,260	6,504	1,476	1,730	6,284	2,121	102,306
Local	9,191	5,817	4,278	803	183	237	696	406	21,611
Cross-Border	34,566	20,357	9,982	5,701	1,293	1,493	5,588	1,715	80,695
With Other Financial Institutions or Non-Financial Customers	176,976	69,695	33,939	3,274	540	8,295	6,811	951	300,481
Local	170,604	69,028	32,642	2,842	359	7,759	3,273	600	287,107
Cross-Border	6,372	667	1,297	432	181	536	3,538	351	13,374
< Maturities >	220,738	95,869	48,196	9,780	2,016	10,026	13,095	3,073	402,793
Seven Days or Less	68,335	24,196	17,761	4,588	631	8,507	6,584	922	131,524
Over Seven Days and up to One Year	138,788	70,171	29,983	5,146	1,384	1,517	6,446	2,139	255,574
Over One Year	13,615	1,502	452	46	1	2	65	12	15,695
<b>Total</b>	<b>220,733</b>	<b>95,869</b>	<b>48,199</b>	<b>9,778</b>	<b>2,016</b>	<b>10,025</b>	<b>13,095</b>	<b>3,072</b>	<b>402,787</b>
<b>OTC Options</b>									
With Interbank Dealers	64,786	6,940	3,414	7,671	2,077	827	313	3,398	89,426
Local	5,939	805	684	102	1	7	0	0	7,538
Cross-Border	58,847	6,135	2,730	7,569	2,076	820	313	3,398	81,888
With Other Financial Institutions or Non-Financial Customers	25,521	4,352	1,865	1,143	116	116	143	144	33,400
Local	22,828	4,258	1,865	353	98	76	42	134	29,654
Cross-Border	2,693	94	0	790	18	40	101	10	3,746
< Maturities >	90,308	11,292	5,277	8,813	2,192	943	456	3,542	122,823
Seven Days or Less	23,185	478	227	2,044	235	22	10	256	26,457
Over Seven Days and up to One Year	53,969	10,165	4,392	6,481	1,883	921	446	3,248	81,505
Over One Year	13,154	649	658	288	74	0	0	38	14,861
<b>Total</b>	<b>90,307</b>	<b>11,292</b>	<b>5,279</b>	<b>8,814</b>	<b>2,193</b>	<b>943</b>	<b>456</b>	<b>3,542</b>	<b>122,826</b>

1) Turnover in nominal or notional principal amounts in April 2009

2) Interbank dealers refers to financial institutions which are participating in interbank market and are treated as such by the respondent.

3) Geographical distinction between "local" and "cross-border" is based on the location of the trading desk of a counterparty. Any transactions with overseas branches or subsidiaries are included in "cross-border".

4) Spot Transaction: 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. Excluding a leg of foreign exchange swaps.

Foreign Exchange Swaps: 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. Excluding a leg of spot transaction.

Outright 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). Including foreign exchange agreement transaction.

OTC Options: Option contract that gives the right to buy or sell a currency with another currency at a specified exchange rate during a specified period.

5) 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.

6) In millions of USD. Data should be rounded to the nearest million USD.

7) In the case of transactions where the first leg has not come due, the remaining maturity is to be determined by the difference between near and far-end dates of the transaction and not by the date of conclusion of the deal.

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

(In millions of USD)

	JPY against			USD against				Residual	Grand Total
	USD	EUR	Other	EUR	GBP	AUD	Other		
<b>Spot Transaction</b>									
With Interbank Dealers	610,877	112,675	60,288	151,976	29,818	26,085	35,769	45,939	1,073,427
Voice Broker	47,362	5,787	399	2,866	149	1,645	845	280	59,333
Electronic Broking Systems (EBS, Reuters Matching)	179,726	54,876	3,928	60,271	11,197	15,427	11,858	8,195	345,478
Electronic Trading Systems	293,756	23,308	31,780	32,641	3,128	1,731	3,541	3,733	393,618
Residual (Interbank Direct by Telephone or Reuters Conversation)	90,033	28,704	24,181	56,198	15,344	7,282	19,525	33,731	274,998
With Other Financial Institutions or Non-Financial Customers	196,271	57,084	49,514	48,539	8,338	22,085	11,801	7,914	401,546
Electronic Trading Systems	62,625	24,137	27,391	38,892	6,487	3,477	5,588	5,522	174,119
Residual (by Telephone)	133,646	32,947	22,123	9,647	1,851	18,608	6,213	2,392	227,427
<b>Total</b>	<b>807,148</b>	<b>169,759</b>	<b>109,802</b>	<b>200,515</b>	<b>38,156</b>	<b>48,170</b>	<b>47,570</b>	<b>53,853</b>	<b>1,474,973</b>
<b>Foreign Exchange Swaps</b>									
With Interbank Dealers	2,042,844	44,993	42,341	268,957	69,039	325,910	220,291	40,318	3,054,693
Voice Broker	1,000,131	27,388	399	100,889	19,570	48,759	22,615	2,850	1,222,601
Electronic Broking Systems (EBS, Reuters Matching)	93,796	2,328	7,283	109,786	27,222	63,184	23,205	31,277	358,081
Electronic Trading Systems	27,200	3,649	26,987	3,768	1,513	803	2,291	205	66,416
Residual (Interbank Direct by Telephone or Reuters Conversation)	921,717	11,628	7,672	54,514	20,734	213,164	172,180	5,986	1,407,595
With Other Financial Institutions or Non-Financial Customers	158,292	31,734	44,944	14,995	7,195	11,926	11,403	2,181	282,670
Electronic Trading Systems	18,454	8,105	15,678	4,101	1,825	643	4,151	730	53,687
Residual (by Telephone)	139,838	23,629	29,266	10,894	5,370	11,283	7,252	1,451	228,983
<b>Total</b>	<b>2,201,136</b>	<b>76,727</b>	<b>87,285</b>	<b>283,952</b>	<b>76,234</b>	<b>337,836</b>	<b>231,694</b>	<b>42,499</b>	<b>3,337,363</b>
<b>Outright Forwards</b>									
With Interbank Dealers	43,759	26,176	14,259	6,503	1,476	1,731	6,283	2,122	102,309
Voice Broker	4,074	417	146	790	242	98	40	341	6,148
Electronic Broking Systems (EBS, Reuters Matching)	2,198	1,873	686	920	101	575	95	125	6,573
Electronic Trading Systems	5,772	1,424	1,328	280	71	101	391	262	9,629
Residual (Interbank Direct by Telephone or Reuters Conversation)	31,715	22,462	12,099	4,513	1,062	957	5,757	1,394	79,959
With Other Financial Institutions or Non-Financial Customers	176,976	69,697	33,941	3,273	539	8,295	6,811	949	300,481
Electronic Trading Systems	18,559	14,952	6,549	1,378	227	192	684	226	42,767
Residual (by Telephone)	158,417	54,745	27,392	1,895	312	8,103	6,127	723	257,714
<b>Total</b>	<b>220,735</b>	<b>95,873</b>	<b>48,200</b>	<b>9,776</b>	<b>2,015</b>	<b>10,026</b>	<b>13,094</b>	<b>3,071</b>	<b>402,790</b>
<b>OTC Options</b>									
With Interbank Dealers	64,786	6,940	3,413	7,671	2,077	827	313	3,398	89,425
Voice Broker	37,003	2,850	1,205	3,880	1,131	348	180	1,763	48,360
Electronic Broking Systems (EBS, Reuters Matching)	0	0	0	0	0	0	0	0	0
Electronic Trading Systems	455	0	0	0	0	0	0	0	455
Residual (Interbank Direct by Telephone or Reuters Conversation)	27,328	4,090	2,208	3,791	946	479	133	1,635	40,610
With Other Financial Institutions or Non-Financial Customers	25,522	4,351	1,865	1,143	116	116	143	144	33,400
Electronic Trading Systems	26	26	23	0	0	7	0	0	82
Residual (by Telephone)	25,496	4,325	1,842	1,143	116	109	143	144	33,318
<b>Total</b>	<b>90,308</b>	<b>11,291</b>	<b>5,278</b>	<b>8,814</b>	<b>2,193</b>	<b>943</b>	<b>456</b>	<b>3,542</b>	<b>122,825</b>

1) Turnover in nominal or notional principal amounts in April 2009

2) Electronic Trading System refers to single-bank and multi-bank trading platforms of e-commerce (e.g., FXAll, FXConnect, Currenex).

&lt; Table 3 &gt; 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
<b>Spot Transaction</b>														
With Interbank Dealers	9,348	4,663	738	1,261	642	50	74	199	71	169	214	145	4,032	21,606
Local	829	80	10	41	81	0	5	83	1	48	0	0	261	1,439
Cross-Border	8,519	4,583	728	1,220	561	50	69	116	70	121	214	145	3,771	20,167
With Other Financial Institutions or Non-Financial Customers	1,475	1,514	151	396	331	6	50	17	30	33	175	147	3,868	8,193
Local	1,187	721	151	356	326	6	50	14	30	33	175	147	2,552	5,748
Cross-Border	288	793	0	40	5	0	0	3	0	0	0	0	1,316	2,445
<b>Total</b>	<b>10,823</b>	<b>6,177</b>	<b>889</b>	<b>1,657</b>	<b>973</b>	<b>56</b>	<b>124</b>	<b>216</b>	<b>101</b>	<b>202</b>	<b>389</b>	<b>292</b>	<b>7,900</b>	<b>29,799</b>
<b>Foreign Exchange Swaps</b>														
With Interbank Dealers	72,126	29,033	0	0	7,451	139	0	0	0	0	0	4	13,759	122,512
Local	383	238	0	0	81	0	0	0	0	0	0	0	5,525	6,227
Cross-Border	71,743	28,795	0	0	7,370	139	0	0	0	0	0	4	8,234	116,285
With Other Financial Institutions or Non-Financial Customers	1,887	651	0	0	190	1	0	0	0	0	0	0	4,882	7,611
Local	1,682	116	0	0	102	1	0	0	0	0	0	0	4,726	6,627
Cross-Border	205	535	0	0	88	0	0	0	0	0	0	0	156	984
<b>Total</b>	<b>74,013</b>	<b>29,684</b>	<b>0</b>	<b>0</b>	<b>7,641</b>	<b>140</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>18,641</b>	<b>130,123</b>
<b>Outright Forwards</b>														
With Interbank Dealers	254	296	188	2,677	259	128	95	204	101	926	223	5	451	5,807
Local	66	84	16	158	47	7	1	7	0	40	0	3	54	483
Cross-Border	188	212	172	2,519	212	121	94	197	101	886	223	2	397	5,324
With Other Financial Institutions or Non-Financial Customers	777	523	486	1,213	215	143	222	310	201	817	130	18	1,243	6,298
Local	770	421	13	258	210	4	5	35	43	19	130	18	792	2,718
Cross-Border	7	102	473	955	5	139	217	275	158	798	0	0	451	3,580
<b>Total</b>	<b>1,031</b>	<b>819</b>	<b>674</b>	<b>3,890</b>	<b>474</b>	<b>271</b>	<b>317</b>	<b>514</b>	<b>302</b>	<b>1,743</b>	<b>353</b>	<b>23</b>	<b>1,694</b>	<b>12,105</b>
<b>Non-Deliverable Forwards (as part of Outright Forwards)</b>														
With Interbank Dealers	0	0	188	2,580	45	85	94	203	101	925	208	4	0	4,433
Local	0	0	16	158	0	7	1	7	0	39	0	2	0	230
Cross-Border	0	0	172	2,422	45	78	93	196	101	886	208	2	0	4,203
With Other Financial Institutions or Non-Financial Customers	0	5	482	1,092	0	143	219	301	138	812	24	14	0	3,230
Local	0	5	9	137	0	4	4	30	15	14	24	14	0	256
Cross-Border	0	0	473	955	0	139	215	271	123	798	0	0	0	2,974
<b>Total</b>	<b>0</b>	<b>5</b>	<b>670</b>	<b>3,672</b>	<b>45</b>	<b>228</b>	<b>313</b>	<b>504</b>	<b>239</b>	<b>1,737</b>	<b>232</b>	<b>18</b>	<b>0</b>	<b>7,663</b>

1) Turnover in nominal or notional principal amounts in April 2009