

THE CANADIAN FOREIGN EXCHANGE COMMITTEE LE COMITÉ CANADIEN DU MARCHÉ DES CHANGES

150 King Street West
Suite 2000
Toronto, Ontario
M5H 1J9

Contact: Rob Ogradnick
Telephone: (416) 542-1339
Email: rogradnick@bankofcanada.ca

CFEC Releases Results of April 2015 Foreign Exchange Volume Survey

27 July 2015 - The Canadian Foreign Exchange Committee (CFEC) released today the results of its April 2015 semi-annual survey of foreign exchange volumes in Canada. The purpose of the survey is to provide information on the size and structure of the foreign exchange and foreign exchange derivatives markets in Canada. Volumes are broken down by product, currency, counterparty, maturity and execution method.

The reporting basis for the survey has been changed starting in April 2015 to reflect trades conducted through a Canadian-based sales desk instead of through a Canadian-based trading desk.¹ This change in methodology was designed to improve the market coverage of the Canadian survey by allowing banks that have a sales desk presence in Canada, but not a trading desk, to participate. As a result of the change, three new banks have been added to the survey participants. Please note that the prior survey results have not been restated to reflect the change in the reporting methodology, and so the percentage changes quoted below also reflect the increased coverage of the survey. The change in methodology makes the survey consistent with the Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity produced by the Bank for International Settlements (BIS).

Please also note the following additional change to the survey beginning with the April 2015 reporting period:

- For the two client counterparty categories “other financial institutions” and “non-financial customers”, a local (inside Canada) and cross-border (outside Canada) breakdown has been added (see the bottom of Table 3).

The summary highlights of the April 2015 survey include the following:

- The monthly turnover in April of traditional foreign exchange products (defined as spot transactions, outright forwards and foreign exchange swaps) totaled almost US\$ 1.6 trillion. On an average daily basis, total turnover rose by 24.3% to US\$ 75.1 billion in April 2015 from US\$ 60.4 billion in October 2014.

¹ Where no sales desk is involved in a transaction, for example in an interbank deal, volumes are based on the trading desk.

- Spot transactions, outright forwards and foreign exchange swaps increased by 4%, 47% and 27% respectively from October 2014 to US\$ 17.1 billion, US\$ 16.1 billion and US\$ 41.9 billion on an average daily basis.
- The monthly turnover in April of foreign exchange derivatives (currency swaps and options) totaled US\$ 98.2 billion. On an average daily basis, derivatives turnover decreased by 25.4% to US\$ 4.7 billion in April 2015 from US\$ 6.3 billion in October 2014.
- Currency swaps and options decreased by 44% and 12% respectively from October 2014 to US\$ 1.5 billion and US\$ 3.1 billion on an average daily basis in April 2015.
- Compared with the survey from one year ago, the average daily turnover of traditional foreign exchange products increased by 29.0% from US\$ 58.2 billion in April 2014, and foreign exchange derivatives increased by 42.4% from US\$ 3.3 billion in April 2014.

The detailed results of the survey are presented in the summary tables attached.

CFEC is an industry group composed of senior representatives from financial institutions actively involved in the foreign exchange market in Canada and the U.S. dollar/Canadian dollar market globally. Formed in 1989, its objective is to provide a forum for the regular discussion of issues and developments pertinent to the foreign exchange market, including the review of market practices and procedures. The Bank of Canada chairs CFEC and provides secretariat services to the Committee.

The Bank of Canada also co-ordinates the CFEC survey on behalf of the market participants. The ten banks that participate in the survey are:

- BAML Canada
- Bank of Nova Scotia
- Barclays Canada
- BMO Capital Markets
- CIBC World Markets
- HSBC Bank Canada
- National Bank of Canada
- RBC Capital Markets
- State Street Canada
- TD Securities

Globally, the (London) Foreign Exchange Joint Standing Committee, the (New York) Foreign Exchange Committee, the Tokyo Foreign Exchange Market Committee, the Singapore Foreign Exchange Market Committee and the Australian Foreign Exchange Committee conduct similar surveys. Their results are also released today (see links below).

<http://www.bankofengland.co.uk/markets/forex/fxjsc/index.htm>

<http://www.newyorkfed.org/fxc/volumesurvey/>

http://www.fxcomtky.com/index_e.html

<http://www.sfemc.org/statistics.asp>

<http://www.rba.gov.au/afxc/statistics/>

The Canadian Foreign Exchange Committee
Semi-annual Foreign Exchange Volume Survey
April 2015

Summary Tables



27 July 2015

Table of Contents

Summary turnover data for April 2015

Table 1	Traditional foreign exchange turnover in Canada - Summary of surveys
Table 2	Over-the-counter (OTC) derivatives market turnover in Canada - Summary of surveys
Table 3	Total reported foreign exchange turnover in Canada
Table 4	Reported foreign exchange turnover in Canada by instrument and by counterparty - Summary of surveys
Table 4a	Breakdown of other financial institutions
Table 5	Currency distribution of foreign exchange market turnover in Canada - Summary of surveys
Table 6	Reported foreign exchange market turnover in Canada by maturity
Table 7	Execution methods

Table 1: Traditional foreign exchange turnover in Canada
Summary of surveys
Billions of U.S. dollars

	Traditional foreign exchange turnover				Number of business days	Average total daily turnover	Per cent change (6 months)	Per cent change (1 year)
	Spot	Outright forwards	FX swaps	Total				
Apr. 2006	235.4	61.1	703.6	1000.1	19	52.6	8.5	
Oct. 2006	238.9	63.3	732.0	1034.1	21	49.2	-6.4	1.4
Apr. 2007	236.5	73.8	756.0	1066.2	20	53.3	8.3	1.3
Oct. 2007	326.5	88.0	1023.9	1438.4	22	65.4	22.7	32.9
Apr. 2008	375.0	110.3	913.0	1398.3	22	63.6	-2.8	19.3
Oct. 2008	401.9	185.3	873.3	1460.4	22	66.4	4.4	1.5
Apr. 2009	248.4	107.2	690.6	1046.1	21	49.8	-25.0	-21.7
Oct. 2009	269.9	99.6	724.1	1093.5	21	52.1	4.6	-21.5
Apr. 2010	358.3	119.5	719.9	1197.7	21	57.0	9.4	14.5
Oct. 2010	326.6	147.6	681.1	1155.3	20	57.8	1.4	10.9
Apr. 2011	347.1	174.7	702.3	1224.1	20	61.2	5.9	7.4
Oct. 2011	319.1	155.5	572.6	1047.2	20	52.4	-14.4	-9.3
Apr. 2012 ¹	315.8	143.1	732.2	1191.1	20	59.6	13.7	-2.6
Oct. 2012	267.0	158.7	695.3	1121.0	22	51.0	-14.4	-2.7
Apr. 2013	343.2	225.7	782.1	1351.0	22	61.4	20.4	3.0
Oct. 2013	320.1	197.6	633.7	1151.5	22	52.3	-14.8	2.6
Apr. 2014	311.2	214.6	695.4	1221.1	21	58.2	11.3	-5.2
Oct. 2014	363.2	241.0	725.0	1329.1	22	60.4	3.8	15.5
Apr. 2015 ²	359.4	337.1	880.1	1576.6	21	75.1	24.3	29.0

¹ Prior to April 2012, eight banks participated in the survey. From April 2012 to October 2014, seven banks participated.

² Starting in April 2015, ten banks are participating in the survey. Also, in April 2015 the reporting basis was changed to reflect trades conducted through a Canadian-based sales desk instead of through a Canadian-based trading desk.

Table 2: Over-the-counter (OTC) derivatives market turnover in Canada
Summary of surveys
Billions of U.S. dollars

	Foreign exchange derivatives			Number of business days	Average total daily turnover	Per cent change (6 months)	Per cent change (1 year)
	Currency swaps	Options	Total				
Apr. 2006	27.6	28.0	55.6	19	2.9	-27.5	
Oct. 2006	18.5	25.5	44.0	21	2.1	-27.6	-47.5
Apr. 2007	22.6	36.4	59.1	20	3.0	42.9	3.4
Oct. 2007	24.0	44.2	68.1	22	3.1	3.3	47.6
Apr. 2008	23.3	35.6	58.9	22	2.7	-12.9	-10.0
Oct. 2008	21.1	39.0	60.1	22	2.7	0.0	-12.9
Apr. 2009	21.8	25.3	47.1	21	2.2	-18.5	-18.5
Oct. 2009	17.6	28.0	45.6	21	2.2	0.0	-18.5
Apr. 2010	24.3	41.7	66.0	21	3.1	40.9	40.9
Oct. 2010	23.9	43.2	67.1	20	3.4	9.7	54.5
Apr. 2011	33.0	44.1	77.1	20	3.9	14.7	25.8
Oct. 2011	27.4	38.3	65.7	20	3.3	-15.4	-2.9
Apr. 2012	25.1	31.5	56.6	20	2.8	-15.2	-28.2
Oct. 2012	35.7	36.7	72.4	22	3.3	17.9	0.0
Apr. 2013	25.8	49.2	75.0	22	3.4	3.0	21.4
Oct. 2013	27.6	60.1	87.6	22	4.0	17.6	21.2
Apr. 2014	21.7	47.9	69.6	21	3.3	-17.5	-2.9
Oct. 2014	60.0	78.3	138.2	22	6.3	90.9	57.5
Apr. 2015	32.2	66.0	98.2	21	4.7	-25.4	42.4

Table 3: Total reported foreign exchange turnover in Canada
Millions of U.S. dollars

Instrument and counterparty	Canadian dollar against U.S. dollar			U.S. dollar against currencies other than the Canadian dollar			Canadian dollar against currencies other than the U.S. dollar			All other currency pairs			All currencies		
	Oct-14	Apr-15	Per cent growth	Oct-14	Apr-15	Per cent growth	Oct-14	Apr-15	Per cent growth	Oct-14	Apr-15	Per cent growth	Oct-14	Apr-15	Per cent growth
Spot	200,113	175,336	-12	132,679	115,934	-13	22,936	58,262	154	7,423	9,897	33	363,150	359,429	-1
Reporting dealers	33,263	24,314	-27	29,815	8,101	-73	2,541	3,293	30	476	1,014	113	66,094	36,722	-44
Other dealers	118,564	100,507	-15	86,745	90,278	4	13,459	39,355	192	6,274	8,173	30	225,042	238,314	6
Other financial institutions	21,499	26,760	24	10,368	12,075	16	3,959	13,605	244	310	391	26	36,136	52,831	46
Non-financial customers	26,787	23,755	-11	5,751	5,480	-5	2,977	2,009	-33	363	318	-12	35,878	31,562	-12
Outright forwards	134,211	149,118	11	82,447	113,608	38	20,340	68,445	237	4,030	5,938	47	241,028	337,109	40
Reporting dealers	13,631	14,591	7	5,498	4,813	-12	430	810	88	269	108	-60	19,828	20,322	2
Other dealers	39,818	38,022	-5	46,433	66,688	44	3,131	32,834	949	1,426	3,813	167	90,808	141,358	56
Other financial institutions	58,209	74,093	27	25,614	36,345	42	13,541	31,827	135	2,041	1,809	-11	99,405	144,075	45
Non-financial customers	22,553	22,412	-1	4,902	5,761	18	3,238	2,974	-8	294	208	-29	30,987	31,355	1
Non-deliverable forwards													22,689	29,306	29
FX swaps	432,004	538,401	25	272,451	309,064	13	17,848	28,413	59	2,660	4,215	58	724,962	880,093	21
Reporting dealers	75,316	80,044	6	5,890	9,099	54	283	120	-58	0	38	-	81,488	89,300	10
Other dealers	265,398	327,163	23	219,384	233,710	7	4,733	14,286	202	1,375	582	-58	490,890	575,741	17
Other financial institutions	48,859	63,939	31	15,591	15,487	-1	10,032	10,673	6	911	1,776	95	75,393	91,876	22
Non-financial customers	42,431	67,256	59	31,586	50,767	61	2,800	3,335	19	374	1,818	386	77,191	123,176	60
Currency swaps	31,451	28,415	-10	10,930	3,124	-71	17,559	542	-97	19	145	661	59,959	32,226	-46
Reporting dealers	8,688	7,983	-8	5,247	801	-85	0	129	-	19	10	-50	13,954	8,923	-36
Other dealers	12,432	5,958	-52	5,197	1,916	-63	837	362	-57	0	132	-	18,466	8,367	-55
Other financial institutions	3,958	6,409	62	250	214	-14	8,641	37	-100	0	0	-	12,849	6,660	-48
Non-financial customers	6,373	8,066	27	236	193	-18	8,081	14	-100	0	3	-	14,690	8,276	-44
OTC options	52,135	33,453	-36	23,694	31,457	33	134	207	55	2,312	869	-62	78,275	65,986	-16
Reporting dealers	4,250	4,881	15	150	2,582	1621	11	70	534	0	163	-	4,411	7,696	74
Other dealers	38,954	22,598	-42	17,930	25,066	40	91	114	26	1,399	609	-56	58,374	48,387	-17
Other financial institutions	873	1,456	67	1,881	2,711	44	0	0	-	645	86	-87	3,399	4,253	25
Non-financial customers	8,058	4,519	-44	3,733	1,098	-71	32	23	-28	268	10	-96	12,091	5,650	-53
Total dealers	610,313	626,059	3	422,288	443,055	5	25,515	91,374	258	11,238	14,642	30	1,069,354	1,175,130	10
Reporting	135,147	131,811	-2	46,599	25,396	-46	3,264	4,421	35	764	1,333	74	185,774	162,962	-12
Other	475,166	494,247	4	375,689	417,659	11	22,251	86,952	291	10,474	13,309	27	883,580	1,012,168	15
Total customers	239,600	298,665	25	99,912	130,132	30	53,301	64,496	21	5,206	6,421	23	398,019	499,714	26
Financial	133,398	172,657	29	53,704	66,832	24	36,173	56,142	55	3,907	4,063	4	227,182	299,694	32
Non-financial	106,202	126,008	19	46,208	63,300	37	17,128	8,354	-51	1,299	2,357	81	170,837	200,020	17
Local		275,667	-		39,969	-		62,261	-		1,300	-		379,197	-
Cross-border		22,998	-		90,162	-		2,236	-		5,121	-		120,516	-
Total turnover	849,913	924,724	9	522,200	573,187	10	78,816	155,870	98	16,444	21,063	28	1,467,373	1,674,843	14

Table 4: Reported foreign exchange turnover in Canada by instrument and by counterparty
Summary of surveys
Billions of U.S. dollars (and percent shares)

	Instrument										Counterparty ¹							
											Dealers				Customers			
	Spot		Outright forwards		Foreign exchange swaps		Currency swaps		OTC options		Reporting		Other		Financial		Non-financial	
Apr-06	235	(22.3)	61	(5.8)	704	(66.5)	28	(2.7)	28	(2.7)	102	(10.2)	705	(70.5)	115	(11.5)	77	(7.7)
Oct-06	239	(22.1)	63	(5.9)	732	(67.8)	19	(1.8)	26	(2.4)	100	(9.6)	710	(68.7)	138	(13.3)	87	(8.4)
Apr-07	236	(21.0)	74	(6.6)	756	(67.2)	23	(2.0)	36	(3.2)	94	(8.8)	698	(65.5)	166	(15.5)	109	(10.2)
Oct-07	326	(21.7)	88	(5.8)	1024	(68.0)	24	(1.6)	44	(2.9)	92	(6.4)	1024	(71.2)	181	(12.6)	141	(9.8)
Apr-08	375	(25.7)	110	(7.6)	913	(62.6)	23	(1.6)	36	(2.5)	154	(11.0)	940	(67.2)	192	(13.8)	112	(8.0)
Oct-08	402	(26.4)	185	(12.2)	873	(57.4)	21	(1.4)	39	(2.6)	155	(10.6)	889	(60.9)	266	(18.2)	151	(10.3)
Apr-09	248	(22.7)	107	(9.8)	691	(63.2)	22	(2.0)	25	(2.3)	169	(16.1)	631	(60.3)	155	(14.8)	91	(8.7)
Oct-09	270	(23.7)	100	(8.7)	724	(63.5)	18	(1.6)	28	(2.5)	111	(10.1)	743	(68.0)	147	(13.5)	93	(8.5)
Apr-10	358	(28.3)	119	(9.4)	720	(57.0)	24	(1.9)	42	(3.3)	108	(9.0)	800	(66.8)	156	(13.0)	134	(11.2)
Oct-10	327	(26.7)	148	(12.1)	681	(55.7)	24	(2.0)	43	(3.5)	87	(7.5)	803	(69.5)	135	(11.7)	130	(11.3)
Apr-11	347	(26.7)	175	(13.4)	702	(54.0)	33	(2.5)	44	(3.4)	129	(10.5)	785	(64.1)	202	(16.5)	109	(8.9)
Oct-11	319	(28.7)	156	(14.0)	573	(51.5)	27	(2.4)	38	(3.4)	117	(11.2)	608	(58.1)	201	(19.1)	121	(11.5)
Apr-12	316	(25.3)	143	(11.4)	732	(58.7)	25	(2.0)	32	(2.6)	117	(9.8)	707	(59.4)	210	(17.6)	157	(13.2)
Oct-12	267	(22.4)	159	(13.3)	695	(58.2)	36	(3.0)	37	(3.1)	108	(9.7)	676	(60.3)	174	(15.5)	163	(14.5)
Apr-13	343	(24.1)	226	(15.8)	782	(54.8)	26	(1.8)	49	(3.5)	105	(7.4)	939	(65.8)	218	(15.3)	164	(11.5)
Oct-13	320	(25.8)	198	(15.9)	634	(51.1)	28	(2.2)	60	(4.8)	117	(9.5)	803	(64.8)	184	(14.8)	135	(10.9)
Apr-14	311	(24.1)	215	(16.6)	695	(53.9)	22	(1.7)	48	(3.7)	132	(10.2)	790	(61.2)	211	(16.4)	158	(12.2)
Oct-14	363	(24.7)	241	(16.4)	725	(49.4)	60	(4.1)	78	(5.3)	186	(12.7)	884	(60.2)	227	(15.5)	171	(11.6)
Apr-15	359	(21.5)	337	(20.1)	880	(52.5)	32	(1.9)	66	(3.9)	163	(9.7)	1012	(60.4)	300	(17.9)	200	(11.9)

¹ Beginning in April 2013, the counterparty breakdown is based on all five foreign exchange instruments, not just traditional foreign exchange turnover (spot, outright forwards and foreign exchange swaps).

Table 4a: Breakdown of other financial institutions
April 2015
Billions of U.S. dollars (and percent shares)

	Spot		Outright forwards		Foreign exchange swaps		Currency swaps		Options		Total	
Total Other Financial Institutions	52.8	(100.0)	144.1	(100.0)	91.9	(100.0)	6.7	(100.0)	4.3	(100.0)	299.7	(100.0)
Institutional investors	41.5	(78.6)	113.1	(78.5)	78.3	(85.2)	3.4	(51.1)	3.0	(71.4)	239.3	(79.9)
Hedge funds and proprietary trading firms	8.4	(15.9)	29.6	(20.6)	9.3	(10.1)	0.5	(7.7)	0.9	(21.2)	48.7	(16.3)
Official sector financial institutions	1.2	(2.2)	1.1	(0.7)	2.8	(3.0)	2.7	(41.2)	0.1	(2.5)	7.9	(2.6)
Other	1.7	(3.3)	0.2	(0.2)	1.5	(1.7)	0.0	(0.0)	0.2	(4.9)	3.7	(1.2)

Table 5: Currency distribution of foreign exchange market turnover in Canada
Summary of surveys¹
Percent shares

Currency	October 2009	April 2010	October 2010	April 2011	October 2011	April 2012	October 2012	April 2013	October 2013	April 2014	October 2014	April 2015
U.S. dollar	95.0	94.1	95.6	91.8	93.7	93.4	94.7	92.8	93.2	92.4	93.5	89.4
Canadian dollar	72.1	68.9	65.1	68.3	66.1	70.1	62.3	58.9	62.2	65.7	63.3	64.5
Euro	11.2	10.8	10.6	11.7	11.4	10.6	12.7	15.4	13.4	10.9	13.6	10.9
U.K. pound	5.6	3.6	5.2	4.0	6.5	5.0	7.4	6.4	6.6	6.0	5.8	7.5
Japanese yen	2.8	3.7	3.1	3.1	3.7	3.1	4.3	4.8	3.3	3.8	4.6	4.3
Australian dollar	2.2	2.3	3.1	2.5	3.8	2.6	3.0	2.6	3.1	3.1	2.3	3.4
Swiss franc	0.9	1.0	1.3	1.1	1.2	1.6	1.0	1.7	1.6	0.8	1.2	1.2
Mexican peso ²	--	--	--	--	--	--	--	3.5	2.5	2.9	3.4	2.7
Chinese yuan ²	--	--	--	--	--	--	--	0.1	0.3	0.4	0.5	0.3
Other currencies	10.2	15.7	15.9	17.6	13.5	13.5	14.6	13.8	13.8	14.0	11.8	15.7
All currencies ³	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0

¹ Beginning in April 2013, the currency distribution is based on all five foreign exchange instruments, not just traditional foreign exchange turnover (spot, outright forwards and foreign exchange swaps).

² The Mexican peso and Chinese yuan were not broken out before April 2013.

³ Since every foreign exchange transaction involves two currencies, the reporting of all currencies necessarily sums to 200 per cent.

Table 6: Reported foreign exchange market turnover in Canada by maturity¹
Millions of U.S. dollars

Instrument	October-11		April-12		October-12		April-13		October-13		April-14		October-14		April-15	
	Amount	% share	Amount	% share	Amount	% share	Amount	% share	Amount	% share	Amount	% share	Amount	% share	Amount	% share
Outright forwards																
Up to 1 month	88,815	55.2	92,168	61.9	106,326	61.7	155,868	66.6	124,908	59.6	144,400	63.4	160,827	61.7	217,901	61.0
1 month to 1 year	69,239	43.0	52,805	35.5	64,416	37.4	75,386	32.2	80,320	38.3	79,522	34.9	96,118	36.8	135,859	38.0
More than 1 year	2,842	1.8	3,812	2.6	1,564	0.9	2,789	1.2	4,407	2.1	3,990	1.8	3,908	1.5	3,672	1.0
Total	160,896	100.0	148,785	100.0	172,306	100.0	234,043	100.0	209,635	100.0	227,912	100.0	260,853	100.0	357,431	100.0
Foreign exchange swaps																
Up to 1 month	469,163	73.5	595,496	72.7	602,668	78.4	653,250	77.3	521,855	76.0	583,763	76.2	587,394	72.8	728,854	75.2
1 month to 1 year	161,685	25.3	187,063	22.8	161,035	20.9	182,342	21.6	158,263	23.0	175,050	22.9	213,063	26.4	231,992	23.9
More than 1 year	7,673	1.2	36,627	4.5	5,443	0.7	9,468	1.1	6,627	1.0	7,235	0.9	5,990	0.7	8,548	0.9
Total	638,521	100.0	819,186	100.0	769,146	100.0	845,060	100.0	686,745	100.0	766,048	100.0	806,447	100.0	969,394	100.0
OTC options																
Up to 1 month	20,980	52.2	13,313	40.7	17,241	44.4	17,508	33.4	29,024	45.5	22,392	44.4	25,641	31.0	37,838	51.4
1 month to 6 months	14,218	35.4	15,123	46.3	15,009	38.7	29,667	56.7	24,717	38.7	17,316	34.3	40,412	48.9	21,458	29.1
Over 6 months	4,979	12.4	4,257	13.0	6,543	16.9	5,185	9.9	10,102	15.8	10,772	21.3	16,632	20.1	14,386	19.5
Total	40,177	100.0	32,693	100.0	38,793	100.0	52,360	100.0	63,843	100.0	50,480	100.0	82,685	100.0	73,682	100.0

¹ Not adjusted for local double-counting.

Table 7: Execution methods
percent shares
April 2015

Classification	Voice		Electronic					TOTAL
	Direct ¹	Indirect ²	Direct ¹		Indirect ²			
			Single-bank Proprietary trading systems	Other	Reuters Matching/ EBS	Other electronic communication networks	Other	
SPOT								
With reporting dealers	66	2	15	1	16	1	0	100
With other dealers	18	10	13	22	30	7	0	100
With other financial institutions	40	2	16	18	4	20	0	100
With non-financial customers	56	4	18	18	0	3	0	100
Total Spot	29	7	14	19	22	8	0	100
OUTRIGHT FORWARDS								
With reporting dealers	55	2	21	0	21	1	0	100
With other dealers	33	5	9	24	7	23	0	100
With other financial institutions	31	0	25	13	1	30	0	100
With non-financial customers	65	0	6	10	0	18	0	100
Total Outright forwards	36	3	16	16	5	24	0	100
FOREIGN EXCHANGE SWAPS								
With reporting dealers	52	18	4	3	23	0	0	100
With other dealers	21	16	22	9	30	2	0	100
With other financial institutions	49	4	6	18	3	20	0	100
With non-financial customers	70	1	0	28	0	0	0	100
Total Foreign exchange swaps	34	13	16	12	22	3	0	100
CURRENCY SWAPS								
With reporting dealers	49	39	5	2	4	3	0	100
With other dealers	41	43	8	3	3	3	0	100
With other financial institutions	72	9	8	1	6	4	0	100
With non-financial customers	50	43	3	0	2	1	0	100
Total Currency swaps	52	35	6	2	4	3	0	100
OTC OPTIONS								
With reporting dealers	31	43	18	6	0	2	0	100
With other dealers	28	47	17	4	0	4	0	100
With other financial institutions	23	42	10	4	0	21	0	100
With non-financial customers	55	26	10	2	0	6	0	100
Total OTC options	31	44	16	4	0	5	0	100
TOTAL FX CONTRACTS	33	11	15	14	17	9	0	100

¹ Direct means not intermediated by a third party.

² Indirect means intermediated by a third party.