

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

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CFEC Releases Results of October 2016 Foreign Exchange Volume Survey - Revised¹

24 January 2017 - The Canadian Foreign Exchange Committee (CFEC) released today the results of its October 2016 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 nine banks with the largest foreign exchange sales activity in Canada participate.

In April 2015 the reporting basis for the survey was changed to reflect transactions conducted through a Canadian-based sales desk² instead of through a Canadian-based trading desk. 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). Prior survey results have not been restated to reflect the change in reporting methodology.

The summary highlights of the October 2016 survey include the following:

- The monthly turnover in October of traditional foreign exchange products (defined as spot transactions, outright forwards and foreign exchange swaps) totaled over US\$ 1.4 trillion. On an average daily basis, total turnover fell by 8.1% to US\$ 71.0 billion in October 2016 from US\$ 77.2 billion in April 2016.
- Spot transactions, outright forwards and foreign exchange swaps decreased by 6%, 7% and 9% respectively from April 2016 to US\$ 15.8 billion, US\$ 11.8 billion and US\$ 43.3 billion on an average daily basis.
- The monthly turnover in October of foreign exchange derivatives (currency swaps and options) totaled US\$ 116.6 billion. On an average daily basis, derivatives turnover decreased by 21.9% to US\$ 5.8 billion in October 2016 from US\$ 7.5 billion in April 2016.
- Currency swaps and options fell by 4% and 32% from April 2016 to US\$ 2.5 billion and US\$ 3.3 billion respectively on an average daily basis in October 2016.

¹ The October 2016 data have been revised since the original publication on 24 January 2017.

² Where no sales desk is involved in a transaction, for example in an interbank deal, volumes are based on the trading desk.

- Compared with the survey from one year ago, the average daily turnover of traditional foreign exchange products increased by 8.8% from US\$ 65.2 billion in October 2014, and foreign exchange derivatives increased by 11.3% from US\$ 5.2 billion in October 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 nine banks that participate in the survey are:

- BAML Canada
- Bank of Nova Scotia
- 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.afxc.rba.gov.au/statistics>

The Canadian Foreign Exchange Committee
Semi-annual Foreign Exchange Volume Survey
October 2016

Summary Tables
Revised



24 January 2017

Table of Contents

Summary turnover data for October 2016

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
Oct. 2015	305.8	243.0	820.4	1369.2	21	65.2	-13.2	7.9
Apr. 2016	353.2	266.5	1001.8	1621.4	21	77.2	18.4	2.8
Oct. 2016	316.5	236.6	866.1	1419.3	20	71.0	-8.1	8.8

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

² In April 2015, ten banks participated in the survey. This declined to nine banks in October 2015. 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
Oct. 2015	56.3	53.7	110.0	21	5.2	10.6	-17.5
Apr. 2016	55.6	101.1	156.7	21	7.5	42.5	59.6
Oct. 2016	50.8	65.8	116.6	20	5.8	-21.9	11.3

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		
	Apr-16	Oct-16	Per cent growth	Apr-16	Oct-16	Per cent growth	Apr-16	Oct-16	Per cent growth	Apr-16	Oct-16	Per cent growth	Apr-16	Oct-16	Per cent growth
Spot	169,217	157,943	-7	144,253	127,136	-12	30,571	21,125	-31	9,123	10,331	13	353,163	316,535	-10
Reporting dealers	20,520	16,676	-19	18,781	21,227	13	990	4,236	328	3,165	3,563	13	43,455	45,702	5
Other dealers	106,238	88,491	-17	106,492	80,412	-24	7,402	5,787	-22	5,546	4,908	-12	225,678	179,598	-20
Other financial institutions	23,523	15,591	-34	14,719	12,539	-15	19,230	6,858	-64	265	367	38	57,737	35,355	-39
Non-financial customers	18,936	37,185	96	4,261	12,958	204	2,949	4,244	44	147	1,493	916	26,293	55,880	113
Outright forwards	132,567	118,115	-11	97,571	91,494	-6	32,383	24,034	-26	3,970	3,004	-24	266,490	236,646	-11
Reporting dealers	13,746	17,997	31	12,572	10,272	-18	1,479	1,607	9	372	259	-30	28,168	30,134	7
Other dealers	27,927	20,475	-27	46,795	41,563	-11	1,710	1,275	-25	1,481	874	-41	77,913	64,187	-18
Other financial institutions	73,651	60,388	-18	32,911	31,378	-5	26,463	18,738	-29	1,606	1,453	-10	134,631	111,957	-17
Non-financial customers	17,243	19,255	12	5,293	8,281	56	2,731	2,414	-12	511	418	-18	25,778	30,368	18
Non-deliverable forwards													22,698	9,148	-60
FX swaps	573,063	519,489	-9	401,727	317,326	-21	22,926	22,458	-2	4,048	6,828	69	1,001,763	866,101	-14
Reporting dealers	62,729	66,527	6	14,286	8,969	-37	1,075	1,004	-7	132	141	6	78,222	76,641	-2
Other dealers	362,608	292,029	-19	323,879	235,877	-27	3,580	4,750	33	1,015	2,038	101	691,082	534,694	-23
Other financial institutions	78,116	53,542	-31	16,621	15,092	-9	16,483	11,129	-32	436	532	22	111,656	80,295	-28
Non-financial customers	69,610	107,391	54	46,941	57,388	22	1,787	5,575	212	2,465	4,117	67	120,803	174,471	44
Currency swaps	40,691	40,669	0	11,246	5,246	-53	3,684	4,530	23	20	397	1885	55,641	50,842	-9
Reporting dealers	14,927	15,483	4	838	844	1	3,476	337	-90	0	0	-	19,241	16,664	-13
Other dealers	7,000	12,610	80	10,086	4,229	-58	34	3,691	10756	20	397	1885	17,140	20,927	22
Other financial institutions	7,413	2,162	-71	10	0	-100	174	38	-78	0	0	-	7,597	2,200	-71
Non-financial customers	11,351	10,414	-8	312	173	-45	0	464	-	0	0	-	11,663	11,051	-5
OTC options	46,018	27,418	-40	52,280	35,539	-32	1,025	1,325	29	1,773	1,515	-15	101,096	65,797	-35
Reporting dealers	2,314	2,181	-6	2,899	1,155	-60	150	0	-100	94	20	-79	5,457	3,356	-39
Other dealers	35,769	18,367	-49	44,492	28,847	-35	824	714	-13	1,561	1,271	-19	82,646	49,199	-40
Other financial institutions	1,734	2,554	47	2,834	1,747	-38	2	275	13650	26	111	327	4,596	4,687	2
Non-financial customers	6,201	4,316	-30	2,055	3,790	84	49	336	586	92	113	23	8,397	8,555	2
Total dealers	653,777	550,835	-16	581,119	433,395	-25	20,720	23,401	13	13,386	13,470	1	1,269,001	1,021,100	-20
Reporting	114,235	118,863	4	49,375	42,467	-14	7,169	7,184	0	3,763	3,982	6	174,542	172,495	-1
Other	539,542	431,972	-20	531,744	390,928	-26	13,550	16,217	20	9,623	9,488	-1	1,094,459	848,605	-22
Total customers	307,778	312,798	2	125,957	143,346	14	69,868	50,071	-28	5,548	8,604	55	509,151	514,819	1
Financial	184,437	134,237	-27	67,095	60,756	-9	62,352	37,038	-41	2,333	2,463	6	316,217	234,494	-26
Non-financial	123,341	178,561	45	58,862	82,590	40	7,516	13,033	73	3,215	6,141	91	192,934	280,325	45
Local	281,124	282,978	1	44,634	70,191	57	68,842	47,905	-30	3,373	5,800	72	397,973	406,874	2
Cross-border	26,655	29,825	12	81,323	73,147	-10	1,026	2,165	111	2,175	2,803	29	111,179	107,940	-3
Total turnover	961,555	863,633	-10	707,076	576,741	-18	90,588	73,472	-19	18,934	22,074	17	1,778,153	1,535,919	-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								
	Spot		Outright forwards		Foreign exchange swaps		Currency swaps		OTC options		Dealers		Customers					
											Reporting		Other		Financial		Non-financial	
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)
Oct-15	306	(20.7)	243	(16.4)	820	(55.5)	56	(3.8)	54	(3.6)	152	(10.3)	857	(58.0)	263	(17.8)	206	(13.9)
Apr-16	353	(19.9)	266	(15.0)	1002	(56.3)	56	(3.1)	101	(5.7)	175	(9.8)	1094	(61.6)	316	(17.8)	193	(10.9)
Oct-16	317	(20.6)	237	(15.4)	866	(56.4)	51	(3.3)	66	(4.3)	172	(11.2)	849	(55.3)	234	(15.3)	280	(18.3)

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

October 2016

Billions of U.S. dollars (and percent shares)

	Spot		Outright forwards		Foreign exchange swaps		Currency swaps		Options		Total	
Total Other Financial Institutions	35.4	(100.0)	112.0	(100.0)	80.3	(100.0)	2.2	(100.0)	4.7	(100.0)	234.5	(100.0)
Institutional investors	28.4	(80.4)	93.5	(83.5)	64.7	(80.6)	1.1	(49.8)	3.5	(75.1)	191.3	(81.6)
Hedge funds and proprietary trading firms	6.0	(17.0)	17.5	(15.6)	9.5	(11.8)	0.5	(22.8)	0.8	(16.0)	34.2	(14.6)
Official sector financial institutions	0.7	(2.1)	0.8	(0.7)	5.1	(6.4)	0.6	(27.3)	0.2	(4.6)	7.5	(3.2)
Other	0.2	(0.5)	0.2	(0.1)	1.0	(1.2)	0.0	(0.1)	0.2	(4.2)	1.5	(0.6)

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

Currency	April 2012	October 2012	April 2013	October 2013	April 2014	October 2014	April 2015	October 2015	April 2016	October 2016
U.S. dollar	93.4	94.7	92.8	93.2	92.4	93.5	89.4	93.2	93.8	93.8
Canadian dollar	70.1	62.3	58.9	62.2	65.7	63.3	64.5	57.2	59.2	61.0
Euro	10.6	12.7	15.4	13.4	10.9	13.6	10.9	14.4	11.8	11.0
U.K. pound	5.0	7.4	6.4	6.6	6.0	5.8	7.5	10.3	11.8	10.8
Japanese yen	3.1	4.3	4.8	3.3	3.8	4.6	4.3	5.6	5.8	5.5
Australian dollar	2.6	3.0	2.6	3.1	3.1	2.3	3.4	2.3	2.6	2.5
Swiss franc	1.6	1.0	1.7	1.6	0.8	1.2	1.2	1.3	1.2	1.3
Mexican peso ²	--	--	3.5	2.5	2.9	3.4	2.7	3.1	2.4	2.8
Chinese yuan ²	--	--	0.1	0.3	0.4	0.5	0.3	0.3	0.7	0.3
Other currencies	13.5	14.6	13.8	13.8	14.0	11.8	15.7	12.2	10.7	11.0
All currencies ³	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	April-12		October-12		April-13		October-13		April-14		October-14		April-15		October-15		April-16		October-16	
	Amount	% share	Amount	% share	Amount	% share	Amount	% share	Amount	% share	Amount	% share	Amount	% share	Amount	% share	Amount	% share	Amount	% share
Outright forwards																				
Up to 1 month	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	128548.0	50.0	157820.0	53.6	141,695	53.1
1 month to 1 year	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	126497.0	49.2	132174.0	44.9	120,630	45.2
More than 1 year	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	1956.0	0.8	4664.0	1.6	4,455	1.7
Total	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	257001.0	100.0	294658.0	100.0	266,780	100.0
Foreign exchange swaps																				
Up to 1 month	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	655546.0	72.8	790867.0	73.2	646,020	68.5
1 month to 1 year	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	240592.0	26.7	273160.0	25.3	292,275	31.0
More than 1 year	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	4274.0	0.5	15958.0	1.5	4,446	0.5
Total	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	900412.0	100.0	1079985.0	100.0	942,741	100.0
OTC options																				
Up to 1 month	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	33243.0	54.4	27660.0	26.0	24,985	36.1
1 month to 6 months	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	18333.0	30.0	38434.0	36.1	32,694	47.3
Over 6 months	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	9480.0	15.5	40458.0	38.0	11,473	16.6
Total	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	61056.0	100.0	106552.0	100.0	69,152	100.0

¹ Not adjusted for local double-counting.

Table 7: Execution methods
percent shares
October 2016

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	81	1	13	0	3	0	0	100
With other dealers	21	5	20	15	28	11	0	100
With other financial institutions	26	4	14	16	3	36	0	100
With non-financial customers	59	3	24	9	1	3	0	100
Total Spot	37	4	19	12	17	11	0	100
OUTRIGHT FORWARDS								
With reporting dealers	45	7	23	10	0	16	0	100
With other dealers	43	11	15	13	7	12	0	100
With other financial institutions	27	7	12	6	1	46	0	100
With non-financial customers	62	6	2	12	3	16	0	100
Total Outright forwards	38	8	13	9	3	29	0	100
FOREIGN EXCHANGE SWAPS								
With reporting dealers	69	10	7	2	12	1	0	100
With other dealers	26	11	27	5	26	4	0	100
With other financial institutions	36	4	9	13	1	36	0	100
With non-financial customers	84	0	0	15	0	1	0	100
Total Foreign exchange swaps	42	8	18	8	18	6	0	100
CURRENCY SWAPS								
With reporting dealers	52	23	12	0	5	9	0	100
With other dealers	62	26	6	0	3	4	0	100
With other financial institutions	96	1	2	0	1	1	0	100
With non-financial customers	94	1	3	0	1	1	0	100
Total Currency swaps	67	18	7	0	3	5	0	100
OTC OPTIONS								
With reporting dealers	27	47	16	6	0	4	0	100
With other dealers	20	48	23	3	0	7	0	100
With other financial institutions	47	27	14	4	0	9	0	100
With non-financial customers	38	22	9	1	0	30	0	100
Total OTC options	24	43	20	3	0	10	0	100
TOTAL FX CONTRACTS	41	9	17	8	14	11	0	100

¹ Direct means not intermediated by a third party.

² Indirect means intermediated by a third party.