

**Bank of Canada
Triennial Central Bank Surveys
of Foreign Exchange and Over-the-Counter (OTC)
Derivatives Markets**

**Turnover for April, 2013
and
Amounts Outstanding as at June 30, 2013**

12 December 2013

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Table 1: Foreign exchange turnover in Canada
Summary of surveys
 Billions of U.S. Dollars in April

	Foreign exchange turnover ¹						Number of business days	Average daily turnover	Per cent change
	Spot	Outright forwards	FX swaps	Currency swaps	Options	Total			
1983	44.3	5.2	53.7			103.2	20	5.2	
1986	81.5	11.2	98.5			191.2	20	9.6	84.6
1989	123.9	14.1	161.9			299.9	20	15.0	56.3
1992	162.1	17.6	281.2			460.9	21	21.9	46.0
1995	228.5	47.9	290.1	1.0	15.0	582.5	19	30.7	40.2
1998	226.5	30.0	516.2	5.8	18.2	796.7	21	37.9	23.5
2001	217.3	45.0	570.6	7.1	44.9	884.9	20	44.2	16.6
2004	385.7	83.4	663.4	12.6	100.4	1245.5	21	59.3	34.2
2007	273.1	86.1	837.3	32.1	52.0	1280.6	20	64.0	7.9
2010	383.9	132.0	710.9	26.0	46.9	1299.7	21	61.9	-3.3
2013	329.0	221.2	782.1	26.8	67.5	1426.5	22	64.8	4.7

¹Currency swaps and options were not included in the survey until 1995.

Table 2: Single-currency interest rate derivatives turnover in Canada
Summary of surveys
 Billions of U.S. Dollars in April

	Single-currency interest rate derivatives				Number of business days	Average daily turnover	Per cent change
	Forward rate agreements	Interest rate swaps	Options	Total			
1995	56.7	20.2	5.6	82.5	19	4.3	
1998	51.0	61.4	22.0	134.4	21	6.4	48.8
2001	57.7	121.5	19.2	198.4	20	9.9	54.7
2004	71.5	152.6	30.4	254.5	21	12.1	22.2
2007	123.8	215.5	72.3	411.6	20	20.6	70.2
2010	137.3	725.6	12.6	875.5	21	41.7	102.4
2013	149.0	554.1	44.4	747.4	22	34.0	-18.5

Table 3: Reported foreign exchange turnover in Canada by instrument and by counterparty
Summary of surveys
 Billions of U.S. dollars (and percent shares)

	Instrument ¹										Counterparty ²					
	Spot		Outright forwards		Foreign exchange swaps		Currency swaps		Options		Reporting dealers		Customers			
													Financial ³		Non-financial	
1983	44	(43)	5	(5)	54	(52)					75	(73)	8	(8)	19	(19)
1986	82	(43)	11	(6)	98	(51)					131	(69)	24	(12)	36	(19)
1989	124	(41)	14	(5)	162	(54)					217	(72)	25	(8)	58	(20)
1992	162	(35)	18	(4)	281	(61)					360	(76)	32	(7)	79	(17)
1995	229	(39)	48	(8)	290	(50)	1	(0)	15	(3)	347	(61)	141	(25)	79	(14)
1998	227	(28)	30	(4)	516	(65)	6	(1)	18	(2)	550	(71)	123	(16)	100	(13)
2001	217	(25)	45	(5)	571	(64)	7	(1)	45	(5)	534	(64)	198	(24)	101	(12)
2004	386	(31)	83	(7)	663	(53)	13	(1)	100	(8)	704	(62)	318	(28)	110	(10)
2007	273	(21)	86	(7)	837	(65)	32	(3)	52	(4)	661	(55)	422	(35)	113	(9)
2010	384	(29)	132	(10)	711	(55)	26	(2)	47	(4)	660	(54)	465	(38)	102	(8)
2013	329	(23)	221	(16)	782	(55)	27	(2)	67	(5)	892	(63)	365	(26)	169	(12)

¹Currency swaps and options were not included in the survey until 1995.

²Beginning in 2013, the counterparty breakdown is based on all five foreign exchange products, not just traditional foreign exchange turnover (spot, outright forwards and foreign exchange swaps).

³A more detailed breakdown of financial customers or other financial institutions is provided in Table 3a.

**Table 3a: Breakdown of the other financial institutions counterparty category
April 2013**

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

	Spot		Outright forwards		Foreign exchange swaps		Currency swaps		Options		Total	
Total Other Financial Institutions	73.5	(100)	107.5	(100)	167.5	(100)	2.7	(100)	14.1	(100)	365.3	(100)
Non-reporting banks	43.4	(59)	23.9	(22)	78.7	(47)	1.8	(66)	4.5	(32)	152.4	(42)
Institutional investors	21.8	(30)	55.7	(52)	67.5	(40)	0.7	(26)	6.6	(47)	152.3	(42)
Hedge funds & proprietary trading firms	7.1	(10)	24.3	(23)	12.9	(8)	0.0	(0)	3.0	(21)	47.3	(13)
Official sector financial institutions	0.8	(1)	3.5	(3)	7.9	(5)	0.2	(8)	0.0	(0)	12.5	(3)
Others	0.3	(0)	0.0	(0)	0.4	(0)	0.0	(0)	0.0	(0)	0.8	(0)

Table 4: Reported foreign exchange turnover in Canada by currency

Summary of surveys ¹

Percent shares

Currency	April 1983	March 1986	April 1989	April 1992	April 1995	April 1998	April 2001	April 2004	April 2007	April 2010	April 2013
U.S. dollar	99.0	99.4	99.2	96.3	96.6	96.8	96.0	95.3	95.6	94.2	92.5
Canadian dollar	75.7	68.2	66.2	65.2	69.6	70.2	61.8	55.5	67.8	69.7	61.2
Euro ²	--	--	--	--	--	--	15.7	17.7	11.7	12.8	17.3
German mark ²	10.7	13.4	12.9	17.0	16.0	14.9	--	--	--	--	--
U.K. pound	6.8	8.3	6.3	6.9	4.4	4.6	7.8	7.8	6.9	4.3	7.9
Japanese yen	2.9	4.2	7.3	5.8	6.0	7.3	8.7	9.4	5.4	4.5	6.2
Australian dollar ³	--	--	--	--	--	1.0	2.3	4.2	3.5	2.8	3.7
Mexican peso ³	--	--	--	--	--	--	0.5	1.9	3.9	2.6	3.1
Swiss franc	2.9	4.7	5.6	5.0	4.4	2.3	4.2	4.5	2.6	1.1	1.5
Swedish krona ³	--	--	--	--	--	--	--	--	--	--	1.4
Hong Kong dollar ³	--	--	--	--	--	--	0.2	1.4	0.5	0.4	0.2
Other currencies	2.0	1.8	2.5	3.8	3.0	2.9	2.8	2.3	2.0	7.4	4.8
All currencies ⁴	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 2013, the currency breakdown is based on all five foreign exchange products, not just traditional foreign exchange turnover (spot, outright forwards and foreign exchange swaps).

² On 1 January 1999, the Euro replaced 11 European currencies including the German mark.

³ "--" indicates the currency was not broken out and reported separately.

⁴ Since every foreign exchange transaction involves two currencies, the reporting of all currencies necessarily sums to 200 per cent.

Table 5: 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 other currencies			Canadian dollar against currencies other than the U.S. dollar			All other currency pairs			All currencies		
	April 2010	April 2013	Per cent growth	April 2010	April 2013	Per cent growth	April 2010	April 2013	Per cent growth	April 2010	April 2013	Per cent growth	April 2010	April 2013	Per cent growth
Spot	217,154	184,502	-15.0	135,484	111,277	-17.9	16,292	22,683	39.2	14,965	10,512	-29.8	383,894	328,973	-14.3
Reporting dealers	127,257	131,254	3.1	89,420	74,906	-16.2	5,515	9,876	79.1	8,208	7,177	-12.6	230,399	223,212	-3.1
Financial customers	60,456	27,399	-54.7	42,205	33,052	-21.7	8,681	9,838	13.3	6,609	3,181	-51.9	117,951	73,470	-37.7
Non-financial customers	29,441	25,849	-12.2	3,859	3,319	-14.0	2,096	2,969	41.7	148	154	4.1	35,544	32,291	-9.2
Outright forwards	55,907	110,752	98.1	56,033	78,442	40.0	15,832	27,665	74.7	4,254	4,328	1.7	132,026	221,186	67.5
Reporting dealers	9,718	46,097	374.3	27,189	39,156	44.0	1,646	2,986	81.4	1,989	2,405	20.9	40,542	90,643	123.6
Financial customers	27,833	47,329	70.0	23,449	35,404	51.0	11,964	23,090	93.0	1,921	1,699	-11.6	65,167	107,522	65.0
Non-financial customers	18,356	17,326	-5.6	5,395	3,882	-28.0	2,222	1,589	-28.5	344	224	-34.9	26,317	23,021	-12.5
o/w Non-deliverable forwards		--			27,290			777			149			28,216	
FX swaps	532,252	420,482	-21.0	158,753	315,502	98.7	18,247	42,547	133.2	1,651	3,596	117.8	710,903	782,127	10.0
Reporting dealers	272,756	262,755	-3.7	113,097	247,243	118.6	2,906	8,540	193.9	40	288	620.0	388,805	518,826	33.4
Financial customers	230,886	106,640	-53.8	36,556	38,028	4.0	13,420	20,206	50.6	730	2,584	254.0	281,592	167,458	-40.5
Non-financial customers	28,610	51,087	78.6	9,100	30,231	232.2	1,921	13,801	618.4	875	724	-17.3	40,506	95,843	136.6
Currency swaps	15,724	21,927	39.4	9,511	4,756	-50.0	362	51	-85.9	442	24	-94.6	26,039	26,758	2.8
Reporting dealers	8,201	13,998	70.7	5,694	3,758	-34.0	0	37		337	24	-92.9	14,232	17,817	25.2
Financial customers	2,091	1,856	-11.2	3,684	871	-76.4	142	0	-100.0	96	0	-100.0	6,013	2,727	-54.6
Non-financial customers	5,432	6,073	11.8	133	127	-4.5	220	14	-93.6	9	0	-100.0	5,794	6,214	7.2
OTC options	23,268	35,749	53.6	18,637	29,318	57.3	1,641	1,752	6.8	3,343	633	-81.1	46,889	67,452	43.9
Reporting dealers	16,278	27,112	66.6	14,527	13,159	-9.4	1,225	940	-23.3	2,616	553	-78.9	34,646	41,764	20.5
Financial customers	2,794	1,415	-49.4	3,509	12,620	259.6	372	31	-91.7	663	0	-100.0	7,338	14,129	92.5
Non-financial customers	4,196	7,222	72.1	601	3,539	488.9	44	781	1675.0	64	17	-73.4	4,905	11,559	135.7
Total reporting dealers	434,210	481,216	10.8	249,927	378,222	51.3	11,292	22,378	98.2	13,189	10,447	-20.8	708,623	892,262	25.9
Total customers	410,095	292,196	-28.7	128,491	161,073	25.4	41,082	69,350	68.8	11,459	8,583	-25.1	591,127	534,234	-9.6
Financial	324,060	184,639	-43.0	109,403	119,975	9.7	34,579	53,165	53.7	10,019	7,464	-25.5	478,061	365,306	-23.6
Non-financial	86,035	107,557	25.0	19,088	41,098	115.3	6,503	16,185	148.9	1,440	1,119	-22.3	113,066	168,928	49.4
Local	294,208	355,008	20.7	31,123	81,340	161.4	37,321	66,655	78.6	1,666	1,246	-25.2	364,317	504,248	38.4
Cross border	550,097	418,404	-23.9	347,295	457,955	31.9	15,053	28,042	86.3	22,988	17,847	-22.4	935,433	922,248	-1.4
Total turnover	844,305	773,412	-8.4	378,418	539,295	42.5	52,374	94,697	80.8	24,654	19,093	-22.6	1,299,750	1,426,496	9.8

Table 6: Reported foreign exchange turnover in Canada in April 2013 by currency pair
Millions of U.S. dollars

Instrument and counterparty	Directly against the U.S. dollar					All other currency pairs	Total
	Canadian dollar	Euro	U.K. pound	Japanese yen	Other		
Spot							
With reporting dealers	131,254	20,027	10,234	13,127	31,519	17,053	223,212
Local	34,297	607	834	350	2,946	1,792	40,824
Cross-border	96,957	19,420	9,400	12,777	28,573	15,261	182,388
With financial customers	27,399	7,066	3,158	4,540	18,288	13,019	73,470
Local	16,389	480	124	720	751	8,464	26,928
Cross-border	11,010	6,586	3,034	3,820	17,537	4,555	46,542
With non-financial customers	25,849	1,051	258	711	1,299	3,123	32,291
Local	24,620	496	109	483	678	2,222	28,608
Cross-border	1,229	555	149	228	621	901	3,683
Outright forwards and FX swaps							
With reporting dealers	308,852	114,021	51,868	32,299	88,213	14,218	609,469
Local	98,803	8,703	2,829	950	5,623	4,137	121,043
Cross-border	210,049	105,318	49,039	31,349	82,590	10,081	488,426
With financial customers	153,969	22,348	11,679	8,762	30,643	47,579	274,980
Local	100,031	4,374	2,143	1,786	2,694	40,401	151,429
Cross-border	53,938	17,974	9,536	6,976	27,949	7,178	123,551
With non-financial customers	68,413	19,993	5,209	1,077	7,834	16,338	118,864
Local	61,432	18,347	4,296	390	6,319	10,352	101,136
Cross-border	6,981	1,646	913	687	1,515	5,986	17,728
Currency swaps and Options							
With reporting dealers	41,110	4,888	1,414	3,622	6,994	1,554	59,581
Local	6,420	764	249	96	316	241	8,085
Cross-border	34,690	4,124	1,165	3,526	6,678	1,313	51,496
With financial customers	3,271	1,603	558	5,855	5,475	94	16,856
Local	1,361	844	230	5,128	3,671	27	11,261
Cross-border	1,910	759	328	727	1,804	67	5,595
With non-financial customers	13,295	1,041	39	37	2,549	812	17,773
Local	11,655	513	3	8	2,490	265	14,934
Cross-border	1,640	528	36	29	59	547	2,839
Summary by instruments							
Total spot	184,502	28,144	13,650	18,378	51,106	33,195	328,973
(Currency share, per cent)	(56.1)	(8.6)	(4.1)	(5.6)	(15.5)	(10.1)	(100.0)
Total outright forwards and FX swaps	531,234	156,362	68,756	42,138	126,690	78,135	1,003,313
(Currency share, per cent)	(52.9)	(15.6)	(6.9)	(4.2)	(12.6)	(7.8)	(100.0)
Total currency swaps and options	57,676	7,532	2,011	9,514	15,018	2,460	94,210
(Currency share, per cent)	(61.2)	(8.0)	(2.1)	(10.1)	(15.9)	(2.6)	(100.0)
Summary by counterparty							
Reporting dealers							
Spot	131,254	20,027	10,234	13,127	31,519	17,053	223,212
Outright forwards and FX swaps	308,852	114,021	51,868	32,299	88,213	14,218	609,469
Currency swaps and options	41,110	4,888	1,414	3,622	6,994	1,554	59,581
Total reporting dealers	481,216	138,935	63,515	49,047	126,725	32,825	892,262
(Currency share, per cent)	(53.9)	(15.6)	(7.1)	(5.5)	(14.2)	(3.7)	(100.0)
Customers							
Spot	53,248	8,117	3,416	5,251	19,587	16,142	105,761
Outright forwards and FX swaps	222,382	42,341	16,888	9,839	38,477	63,917	393,844
Currency swaps and options	16,566	2,644	597	5,892	8,024	906	34,629
Total customer	292,196	53,102	20,901	20,982	66,088	80,965	534,234
(Currency share, per cent)	(54.7)	(9.9)	(3.9)	(3.9)	(12.4)	(15.2)	(100.0)
Total turnover							
(Currency share, per cent)	(54.2)	(13.5)	(5.9)	(4.9)	(13.5)	(8.0)	(100.0)

Table 7: Reported foreign exchange market turnover in Canada by maturity¹

Millions of U.S. dollars

Instrument	1998		2001		2004		2007		2010		2013	
	Amounts	% share	Amounts	% share	Amounts	% share	Amounts	% share	Amounts	% share	Amounts	% share
Outright forwards												
Up to 7 days	10,045	30.5	18,103	38.4	28,679	33.7	35,172	37.1	46,297	32.8	101,660	40.1
Over 7 days and up to 1 year	20,224	61.4	27,675	58.8	52,377	61.6	57,853	61.0	91,290	64.6	148,571	58.6
Over one year	2,656	8.1	1,306	2.8	3,995	4.7	1,851	2.0	3,677	2.6	3,215	1.3
Total	32,925	100.0	47,084	100.0	85,051	100.0	94,876	100.0	141,264	100.0	253,446	100.0
Foreign exchange swaps												
Up to 7 days	458,098	72.2	445,261	70.1	548,093	76.6	699,368	74.8	573,787	70.6	566,641	65.1
Over 7 days and up to 1 year	168,461	26.6	177,050	27.9	160,716	22.5	231,368	24.8	232,868	28.7	288,801	33.2
Over one year	7,668	1.2	12,793	2.0	6,605	0.9	4,042	0.4	5,847	0.7	15,467	1.8
Total	634,227	100.0	635,104	100.0	715,414	100.0	934,778	100.0	812,502	100.0	870,909	100.0

¹ Not adjusted for local double counting.

Table 8: Foreign exchange transactions in Canada in April 2013 involving the Canadian dollar against all currencies other than the U.S. dollar

Millions of U.S. dollars

Instrument	Euro	U.K. pound	Japanese yen	Swedish Krona	Australian dollar	Swiss franc	Other	Total
Spot	6,324	4,968	2,276	4,294	3,366	354	1,103	22,683
Outright forwards	11,108	3,492	3,953	3,415	2,107	971	2,621	27,665
FX swaps	20,385	10,703	6,926	499	1,969	208	1,858	42,547
Currency swaps	23	28	0	0	0	0	0	51
OTC options	175	1,033	371	0	63	30	80	1,752
Total turnover	38,014	20,223	13,525	8,207	7,505	1,563	5,661	94,697
Currency share (per cent)	(40.1)	(21.4)	(14.3)	(8.7)	(7.9)	(1.6)	(6.0)	(100.0)

Table 9: Execution methods for foreign exchange contracts
 Percentage share of total transactions, April 2013

	Voice		Electronic					Total
	Direct ¹	Indirect ²	Direct ¹		Indirect ²			
			Single-bank proprietary trading systems	Other	Reuters Matching/ EBS	Other electronic communication networks ³	Other	
Spot - Total	44	13	7	10	22	4	0	100
with reporting dealers	40	15	7	6	29	3	0	100
local	51	17	3	3	23	4	0	100
cross-border	35	14	8	8	33	2	0	100
with other financial institutions	48	7	7	23	5	10	0	100
with non-financial customers	69	3	10	17	0	1	0	100
Outright forwards - Total	60	7	4	4	7	18	0	100
with reporting dealers	61	10	2	1	13	13	0	100
local	56	8	1	0	16	19	0	100
cross-border	67	11	3	3	10	7	0	100
with other financial institutions	53	5	7	6	1	28	0	100
with non-financial customers	84	2	3	8	0	4	0	100
FX swaps - Total	38	12	18	7	21	5	0	100
with reporting dealers	28	14	24	5	26	3	0	100
local	46	20	6	2	22	4	0	100
cross-border	21	12	31	6	27	3	0	100
with other financial institutions	42	9	5	14	17	13	0	100
with non-financial customers	90	0	0	7	0	2	0	100
Currency swaps - Total	55	41	1	2	1	0	0	100
with reporting dealers	40	56	1	3	1	0	0	100
local	42	56	1	0	1	0	0	100
cross-border	38	56	1	4	0	0	0	100
with other financial institutions	95	2	1	1	1	1	0	100
with non-financial customers	94	3	1	2	1	0	0	100
OTC options - Total	48	8	35	2	3	4	0	100
with reporting dealers	33	9	53	2	3	0	0	100
local	52	8	34	1	6	0	0	100
cross-border	29	9	57	2	2	0	0	100
with other financial institutions	67	1	5	3	2	22	0	100
with non-financial customers	83	11	4	1	1	0	0	100
Total	44	12	13	7	18	7	0	100

¹ Direct means not intermediated by a third party.

² Indirect means intermediated by a third party.

³ Multi-bank dealing systems in which various banks provide liquidity to the system.

Table 10: Geographical distribution of global foreign exchange market turnover¹

Daily averages in billions of U.S. dollars and percent shares

Country	April 2004		April 2007		April 2010		April 2013		Per cent growth 2013/2010
	Amount	% Share	Amount	% Share	Amount	% Share	Amount	% Share	
Canada	59	2	64	1	62	1	65	1	5
United Kingdom	835	32	1483	35	1854	37	2726	41	47
United States	499	19	745	17	904	18	1263	19	40
Singapore	134	5	242	6	266	5	383	6	44
Japan	207	8	250	6	312	6	374	6	20
Hong Kong	106	4	181	4	238	5	275	4	16
Switzerland	85	3	254	6	249	5	216	3	-13
France	67	3	127	3	152	3	190	3	25
Australia	107	4	176	4	192	4	182	3	-5
Netherlands	52	2	25	1	18	0	112	2	522
Germany	120	5	101	2	109	2	111	2	2
Denmark	42	2	88	2	120	2	103	2	-14
Russia	30	1	50	1	42	1	61	1	45
Luxembourg	15	1	44	1	33	1	51	1	55
Korea	21	1	35	1	44	1	48	1	9
Sweden	32	1	44	1	45	1	44	1	-2
China	1	0	9	0	20	0	44	1	120
Spain	14	1	17	0	29	1	43	1	48
Mexico	15	1	15	0	17	0	32	0	88
India	7	0	38	1	27	1	31	0	15
Turkey	3	0	4	0	17	0	27	0	59
Chinese Taipei	9	0	16	0	18	0	26	0	44
Italy	23	1	38	1	29	1	24	0	-17
Belgium	21	1	50	1	33	1	22	0	-33
Norway	14	1	32	1	22	0	21	0	-5
South Africa	10	0	14	0	14	0	21	0	50
Austria	15	1	19	0	20	0	17	0	-15
Brazil	4	0	6	0	14	0	17	0	21
Finland	2	0	8	0	31	1	15	0	-52
Other countries	59	2	106	2	112	2	127	2	13
Total	2,608	100	4,281	100	5043	100	6671	100	32

Source: Bank for International Settlements, Triennial Central Bank Survey, Foreign exchange turnover in April 2013: preliminary global results, September 2013, Table 6.

The data are adjusted for local (but not cross-border) double-counting arising from business between reporting dealers.

¹ Foreign exchange turnover includes spot transactions, outright forwards, foreign exchange swaps, currency swaps and options.

Table 11: Currency distribution of global foreign exchange market turnover¹
Percent shares of average daily turnover

Currency	April 1998	April 2001	April 2004	April 2007	April 2010	April 2013
U.S. dollar	86.8	89.9	88.0	85.6	84.9	87.0
Euro	--	37.9	37.4	37.0	39.1	33.4
German mark ²	30.1	--	--	--	--	--
French franc ²	5.1	--	--	--	--	--
ECU and other EMS currencies ²	17.3	--	--	--	--	--
Japanese yen	21.7	23.5	20.8	17.2	19.0	23.0
U.K. pound	11.0	13.0	16.5	14.9	12.9	11.8
Australian dollar	3.0	4.3	6.0	6.6	7.6	8.6
Swiss franc	7.1	6.0	6.0	6.8	6.4	5.2
Canadian dollar	3.5	4.5	4.2	4.3	5.3	4.6
Mexican peso ³	0.5	0.8	1.1	1.3	1.3	2.5
Chinese yuan ³	0.0	0.0	0.1	0.5	0.9	2.2
New Zealand dollar ³	0.2	0.6	1.1	1.9	1.6	2.0
Other currencies	13.7	19.5	18.8	23.9	21.0	19.7
All currencies⁴	200.0	200.0	200.0	200.0	200.0	200.0

Source: Bank for International Settlements, Triennial Central Bank Survey, Foreign exchange turnover in April 2013: preliminary global results, September 2013, Table 2.

¹ Foreign exchange turnover includes spot transactions, outright forwards, foreign exchange swaps, currency swaps and options.

² Calculated from the 1998 BIS survey. Includes only traditional foreign exchange products (which excludes currency swaps and options).

³ According to the BIS, turnover for years prior to 2013 may be underestimated owing to incomplete reporting of offshore trading in previous surveys. Methodological changes in the 2013 survey ensured more complete coverage of activity in emerging market and other currencies.

⁴ Since every foreign exchange transaction involves two currencies, the reporting of all currencies necessarily sums to 200 per cent.

Table 12: Global trading of the Canadian dollar¹
Percent share of total

Country	April 1995	April 1998	April 2001	April 2004	April 2007	April 2010	April 2013
Canada	41.3	37.7	35.4	30.0	24.5	16.4	13.0
United States	18.6	18.8	25.4	29.2	28.5	32.0	34.4
United Kingdom	22.4	23.3	25.9	23.2	25.6	33.2	34.0
Singapore	5.5	7.8	3.5	2.2	4.5	3.9	3.1
Netherlands	0.3	0.2	0.2	0.9	0.3	0.1	2.2
Hong Kong	2.9	2.0	0.9	1.4	1.3	1.4	2.1
France	0.7	0.5	1.7	1.7	2.9	2.1	2.1
Japan	2.4	1.9	1.3	3.7	3.5	2.3	2.0
Switzerland	2.6	1.9	0.6	1.3	2.8	3.0	1.9
Australia	0.7	0.5	1.9	2.8	2.4	2.3	1.9
Germany	1.4	0.8	0.8	1.1	0.7	0.6	1.0
Denmark	0.1	0.2	0.3	0.3	0.2	0.6	0.5
Other	1.1	4.4	2.1	2.2	2.8	2.1	1.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Calculated from Bank for International Settlements, Triennial Central Bank Surveys, various reports.
Data are adjusted for local inter-dealer double-counting.

¹ As of April 2010 includes all five foreign exchange products. Prior years are based on the three traditional foreign exchange products.

Table 13: Total single-currency interest rate derivatives turnover in Canada

Millions of U.S. dollars

Instrument and counterparty	Canadian dollar			U.S. Dollar			All other currencies			All currencies		
	April 2010	April 2013	Per cent growth	April 2010	April 2013	Per cent growth	April 2010	April 2013	Per cent growth	April 2010	April 2013	Per cent growth
Forward rate agreements	102,456	22,380	-78.2	21,616	101,090	367.7	13,257	25,525	92.5	137,329	148,995	8.5
Reporting dealers	96,433	20,990	-78.2	12,833	22,039	71.7	4,253	11,370	167.3	113,519	54,399	-52.1
Financial customers	6,023	993	-83.5	8,783	79,051	800.0	9,004	14,155	57.2	23,810	94,199	295.6
Non-financial customers	0	397	--	0	0	--	0	0	--	0	397	--
Interest rate swaps	459,037	305,922	-33.4	137,150	165,683	20.8	129,430	82,482	-36.3	725,616	554,087	-23.6
Reporting dealers	346,562	110,733	-68.0	114,562	95,506	-16.6	96,856	10,785	-88.9	557,979	217,024	-61.1
Financial customers	76,348	176,457	131.1	17,001	68,148	300.8	16,952	71,339	320.8	110,301	315,944	186.4
Non-financial customers	36,127	18,732	-48.1	5,587	2,029	-63.7	15,622	358	-97.7	57,336	21,119	-63.2
OTC options	5,753	31,119	440.9	5,845	13,168	125.3	981	82	-91.6	12,579	44,368	252.7
Reporting dealers	2,690	26,448	883.2	3,957	11,611	193.4	981	82	-91.6	7,628	38,140	400.0
Financial customers	588	2,962	403.7	449	70	-84.4	0	0	--	1,037	3,032	192.4
Non-financial customers	2,475	1,709	-30.9	1,439	1,487	3.3	0	0	--	3,914	3,196	-18.3
Total reporting dealers	445,685	158,171	-64.5	131,352	129,155	-1.7	102,090	22,237	-78.2	679,126	309,563	-54.4
Total customers	121,561	201,250	65.6	33,259	150,785	353.4	41,578	85,852	106.5	196,398	437,887	123.0
Financial	82,959	180,412	117.5	26,233	147,269	461.4	25,956	85,494	229.4	135,148	413,175	205.7
Non-financial	38,602	20,838	-46.0	7,026	3,516	-50.0	15,622	358	-97.7	61,250	24,712	-59.7
Local	163,672	128,737	-21.3	22,412	23,237	3.7	736	570	-22.6	186,820	152,544	-18.3
Cross border	403,573	230,684	-42.8	142,198	256,703	80.5	142,932	107,519	-24.8	688,703	594,906	-13.6
Total turnover	567,245	359,421	-36.6	164,610	279,940	70.1	143,668	108,089	-24.8	875,523	747,450	-14.6

Table 14: Geographical distribution of global interest rate derivatives turnover¹

Daily averages in billions of U.S. dollars and percent shares

Country	April 2004		April 2007		April 2010		April 2013		Per cent growth 2013/2010
	Amount	% Share	Amount	% Share	Amount	% Share	Amount	% Share	
Canada	12.1	0.9	20.6	0.9	41.7	1.6	34.0	1.2	-18.5
United Kingdom	563.0	42.3	957.1	44.0	1,234.9	46.6	1,347.7	48.9	9.1
United States	317.4	23.9	525.0	24.2	641.8	24.2	628.2	22.8	-2.1
France	151.3	11.4	176.1	8.1	193.3	7.3	202.2	7.3	4.6
Germany	42.8	3.2	90.2	4.2	48.5	1.8	101.3	3.7	108.9
Japan	30.9	2.3	76.4	3.5	89.9	3.4	67.1	2.4	-25.4
Australia	12.8	1.0	22.7	1.0	40.6	1.5	66.2	2.4	63.1
Denmark	10.8	0.8	10.0	0.5	16.4	0.6	59.4	2.2	262.2
Singapore	8.6	0.6	57.4	2.6	34.6	1.3	37.1	1.3	7.2
Switzerland	12.0	0.9	60.7	2.8	74.9	2.8	32.6	1.2	-56.5
Netherlands	18.8	1.4	27.0	1.2	61.3	2.3	28.7	1.0	-53.2
Hong Kong	11.3	0.8	17.3	0.8	18.5	0.7	27.9	1.0	50.8
Italy	37.9	2.8	29.8	1.4	27.3	1.0	24.0	0.9	-12.1
Sweden	7.4	0.6	12.3	0.6	18.2	0.7	17.0	0.6	-6.6
Spain	11.9	0.9	16.8	0.8	30.7	1.2	13.7	0.5	-55.4
China	--	--	--	--	1.5	0.1	13.0	0.5	766.7
South Africa	3.0	0.2	4.5	0.2	6.0	0.2	10.6	0.4	76.7
Other Countries	78.5	5.9	69.3	3.2	68.7	2.6	47.9	1.7	-30.3
Total	1330.5	100.0	2,173.2	100.0	2,648.8	100.0	2,758.6	100.0	4.1

Source: Bank for International Settlements, Triennial Central Bank Survey, OTC interest rate derivatives in April 2013: preliminary global results, September 2013, Table 5. The data are adjusted for local (but not cross-border) double counting arising from business between reporting dealers.

¹ Interest rate derivatives include forward rate agreements, interest rate swaps and options.

Table 15: OTC derivatives reported by Canadian financial institutions
Principal amounts outstanding and gross market values
as at June 30, 2013¹
Billions of U.S. dollars

Instrument	Principal amounts outstanding		Gross markets values	
	End-June 2010	End-June 2013	End-June 2010	End-June 2013
Foreign exchange derivatives				
Outright forwards & FX swaps	1,835.3	2,208.3		
Currency swaps	905.6	1,328.2		
Options	220.9	141.4		
Total	2,961.8	3,677.9	152.3	141.0
Interest rate derivatives				
FRAs	1,228.9	1,366.3		
Swaps	7,776.9	12,556.5		
Options	432.3	392.6		
Total	9,438.2	14,315.4	263.7	343.5
Equity and stock index derivatives				
Forwards and swaps	132.4	191.2		
Options	46.4	108.2		
Total	178.8	299.3	20.3	33.7
Commodity and precious metal derivatives (excluding Gold)	74.1	90.1	12.3	5.6
Credit derivatives	259.2	121.6	13.3	3.0
Other derivatives	19.8	0.0	0.2	0.0
Total derivatives	12,932.0	18,504.4	462.2	526.8

¹ Not adjusted for inter-dealer double-counting.

Table 16: Foreign exchange derivatives reported by Canadian financial institutions
Principal amounts outstanding and gross market values
as at June 30, 2013¹
Billions of U.S. dollars

Currency	Principal amounts outstanding				Gross market values
	Outright forwards and FX swaps	Currency swaps	OTC options	Total	
Canadian dollar	1,003.1	598.8	59.5	1,661.4	60.8
U.S. dollar	2,082.6	1,236.4	134.4	3,453.4	132.7
Euro	367.1	308.6	19.7	695.3	19.5
Japanese yen	263.1	22.1	39.6	324.8	15.6
U.K. pound	256.7	120.6	7.7	385.0	7.6
Swiss franc	50.3	13.3	3.3	66.9	2.2
Swedish krona	9.1	11.2	0.1	20.4	0.4
Australian dollar	96.2	250.4	11.3	357.9	28.5
Mexican peso	30.8	12.4	1.9	45.2	2.0
Other	257.8	82.7	5.0	345.5	12.8
Total²	2,208.3	1,328.2	141.4	3,677.9	141.0
By maturity:					
Up to 1 year	2,143.4		106.9	2,250.3	
Over 1 year to 5 years	990.2		26.7	1,016.8	
Over 5 years	403.0		7.8	410.8	

¹ Not adjusted for inter-dealer double-counting.

² Each foreign exchange contract was reported twice, according to the currencies making up the two "legs" of the contract. The totals were halved to correct for this double-counting.

**Table 17: Single-currency interest rate derivatives reported
by Canadian financial institutions
Principal amounts outstanding and gross market values
as at June 30, 2013¹
Billions of U.S. dollars**

Currency	Principal amounts outstanding				Gross market values
	Forward rate agreements	Interest rate swaps	OTC options	Total	
Canadian dollar	72.4	5,446.3	59.8	5,578.5	102.3
U.S. dollar	666.6	4,182.4	254.3	5,103.3	119.4
Euro	344.4	1,457.3	62.4	1,864.1	66.6
Japanese yen	0.0	52.7	1.2	53.8	1.1
U.K. pound	82.6	684.4	14.0	780.9	30.7
Swiss franc	2.5	9.4	0.0	11.9	0.3
Swedish krona	60.8	38.8	0.0	99.6	1.3
Australian dollar	24.1	479.8	0.6	504.5	14.5
Other	113.0	205.4	0.4	318.7	7.3
Total	1,366.3	12,556.5	392.6	14,315.4	343.5
By maturity:					
Up to 1 year	4,867.8		142.0	5,009.8	
Over 1 year to 5 years	6,487.4		188.7	6,676.2	
Over 5 years	2,567.7		61.9	2,629.5	

¹ Not adjusted for inter-dealer double-counting.

Table 18: Equity and stock index derivatives reported by Canadian financial institutions
Principal amounts outstanding and gross market values
as at June 30, 2013¹
 Billions of U.S. dollars

Nationality of issuer	Principal amounts outstanding			Gross market values
	Forwards and swaps	OTC options	Total	
Canadian	136.4	39.0	175.4	22.4
American (U.S.)	48.5	59.4	108.0	10.1
European	4.1	6.8	11.0	1.0
Japanese	0.4	0.9	1.3	0.1
Other	1.7	2.0	3.7	0.1
Total	191.2	108.2	299.3	33.7
By maturity:				
Up to 1 year	123.6	14.4	138.0	
Over 1 year to 5 years	24.6	48.9	73.5	
Over 5 years	43.0	44.9	87.9	

¹ Not adjusted for inter-dealer double-counting.

Table 19: All other derivatives reported by Canadian financial institutions
Principal amounts outstanding and gross market values
as at June 30, 2013¹
 Billions of U.S. dollars

Instrument	Principal amounts outstanding			Gross market values
	Forwards and swaps	OTC options	Total	
Commodities and precious metals (excluding Gold)	57.3	32.9	90.1	5.6
Credit	121.3	0.3	121.6	3.0
Other	0.0	0.0	0.0	0.0

¹ Not adjusted for inter-dealer double-counting.

Table 20: Credit default swaps reported by Canadian financial institutions
Principal amounts outstanding and gross market values

as at June 30, 2013¹

Billions of U.S. dollars

Instruments	Notional amounts						Gross market values
	Total		Sovereigns		Non-Sovereigns		
	Bought	Sold	Bought	Sold	Bought	Sold	
Single - name							
With reporting dealers	38.5	25.3	2.8	2.7	35.7	22.7	1.4
With other financial institutions	8.8	7.7	0.3	0.5	8.5	7.2	0.3
With central counterparties	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Banks and securities firms	4.5	4.8	0.3	0.5	4.2	4.4	0.2
Insurance firms (including pension funds)	0.2	0.2	0.0	0.0	0.1	0.2	0.0
SPVs, SPCs, or SPEs	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hedge funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	4.1	2.6	0.0	0.0	4.1	2.6	0.1
With non-financial customers	0.0	0.1	0.0	0.1	0.0	0.0	0.0
Total	47.3	33.1	3.1	3.2	44.2	29.8	1.7
Multi - name							
With reporting dealers	6.0	8.9	0.2	0.2	5.8	8.7	0.6
With other financial institutions	17.6	8.2	0.0	0.0	17.6	8.1	0.6
With central counterparties	3.9	3.4	0.0	0.0	3.9	3.4	0.1
Banks and securities firms	1.0	3.4	0.0	0.0	1.0	3.4	0.1
Insurance firms (including pension funds)	5.5	0.0	0.0	0.0	5.5	0.0	0.3
SPVs, SPCs, or SPEs	4.7	0.0	0.0	0.0	4.7	0.0	0.0
Hedge funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	2.4	1.3	0.0	0.0	2.4	1.3	0.1
With non-financial customers	0.1	0.0	0.0	0.0	0.1	0.0	0.0
Total	23.7	17.0	0.2	0.2	23.5	16.8	1.2
Total all contracts	71.0	50.1	3.3	3.4	67.7	46.7	2.9

¹ Not adjusted for inter-dealer double-counting.