

Bank of Canada
Triennial Central Bank Surveys
of Foreign Exchange and Over-the-Counter (OTC)
Derivatives Markets
Turnover for April, 2007
and
Amounts Outstanding as at June 30, 2007

January 4, 2008

Table of Content

Turnover data for April, 2007

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 change turnover in Canada by instrument and by counterparty - Summary of surveys
Table 5	Currency distribution of traditional foreign exchange market turnover in Canada - Summary of surveys
Table 6	Reported foreign exchange turnover in Canada in April 2007 by currency pair
Table 7	Reported foreign exchange market turnover in Canada by maturity
Table 8	Foreign exchange transactions in Canada in April 2007 involving the Canadian dollar against all currencies other than the U.S. dollar
Table 9	Geographical distribution of global traditional foreign exchange market turnover
Table 10	Currency distribution of global traditional foreign exchange market turnover
Table 11	Global trading of the Canadian dollar
Table 12	Total single-currency interest rate derivatives turnover in Canada
Table 13	Geographical distribution of global OTC derivatives turnover
Table 14	Role of electronic-based systems and voice brokers

Amounts outstanding as at June 30, 2007

Table 15	OTC derivatives reported by Canadian financial institutions
Table 16	Foreign exchange derivatives reported by Canadian financial institutions
Table 17	Single-currency interest rate derivatives reported by Canadian financial institutions
Table 18	Equity and stock index derivatives reported by Canadian financial institutions
Table 19	All other derivatives reported by Canadian financial institutions
Table 20	Credit default swaps reported by Canadian financial institutions

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

	Foreign exchange turnover				Number of business days	Average daily turnover	Per cent change
	Spot	Outright forwards	FX swaps	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	566.5	19	29.8	36.1
1998	226.5	30.0	516.2	772.7	21	36.8	23.5
2001	217.3	45.0	570.6	832.9	20	41.6	13.0
2004	385.7	83.4	663.4	1132.5	21	53.9	29.6
2007	273.1	86.1	837.3	1196.5	20	59.8	11.0

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

	Foreign exchange derivatives			Single-currency interest rate derivatives			
	Currency swaps	Options	Total	Forward rate agreements	Interest rate swaps	Options	Total
1995	0.1	0.8	0.9	3.0	1.0	0.3	4.3
1998	0.3	0.8	1.1	2.4	2.9	1.1	6.4
2001	0.3	2.3	2.6	2.9	6.1	0.9	9.9
2004	0.6	4.8	5.4	3.4	7.3	1.4	12.1
2007	1.6	2.6	4.2	6.2	10.8	3.6	20.6

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 other currencies			Canadian dollar against currencies other than the U.S. dollar			All other currency pairs			All currencies		
	April 2004	April 2007	Per cent growth	April 2004	April 2007	Per cent growth	April 2004	April 2007	Per cent growth	April 2004	April 2007	Per cent growth	April 2004	April 2007	Per cent growth
Spot	169480	162540	-4.1	186101	92253	-50.4	5567	7503	34.8	24531	10780	-56.1	385679	273075	-29.2
Reporting dealers	91044	90923	-0.1	124204	57303	-53.9							233017	155212	-33.4
Financial customers	49416	45882	-7.2	55614	31779	-42.9							115620	86400	-25.3
Non-financial customers	29020	25735	-11.3	6283	3171	-49.5							37042	31463	-15.1
Outright forwards	48207	45469	-5.7	26351	24452	-7.2	4908	13571	176.5	3973	2577	-35.1	83439	86069	3.2
Reporting dealers	6269	12757	103.5	10824	-80981	-848.2							19320	28236	46.1
Financial customers	22940	16820	-26.7	11639	8617	-26.0							39750	35646	-10.3
Non-financial customers	18998	15892	-16.3	3888	4382	12.7							24369	22187	-9.0
FX swaps	391149	559264	43.0	259010	256500	-1.0	9693	20464	111.1	3482	1106	-68.2	663334	837334	26.2
Reporting dealers	241658	311631	29.0	204979	159080	-22.4							451392	477864	5.9
Financial customers	114758	200084	74.4	42861	90148	110.3							162626	300014	84.5
Non-financial customers	34733	47549	36.9	11170	7272	-34.9							49316	59456	20.6
Total reporting dealers	338971	415311	22.5	340007	135402	-60.2	5059	11955	136.3	19692	6210	-68.5	703729	661311	-6.0
Total customers	269865	351962	30.4	131455	145369	10.6	15109	29582	95.8	12294	8253	-32.9	428723	535166	24.8
Financial	187114	262786	40.4	110114	130544	18.6	10054	21382	112.7	10714	7348	-31.4	317996	422060	32.7
Non-financial	82751	89176	7.8	21341	14825	-30.5	5055	8200	62.2	1580	905	-42.7	110727	113106	2.1
Local	242947	305003	25.5	33026	78914	138.9	13563	35675	163.0	2048	1882	-8.1	291584	389819	33.7
Cross border	365889	462270	26.3	438436	325945	-25.7	6605	5862	-11.2	29938	12581	-58.0	840868	806658	-4.1
Total turnover	608836	767273	26.0	471462	373205	-20.8	20168	41537	106.0	31986	14463	-54.8	1132452	1196477	5.7
<i>Currency swaps</i>	10063	17510	74.0	1048	12525	1095.1	475	7299	1436.5	966	3	-99.7	12552	32067	155.5
<i>OTC options</i>	33841	39693	17.3	57672	9671	-83.2	2680	1146	-57.2	6158	1513	-75.4	100351	52023	-48.2

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					
	Spot		Outright forwards		Foreign exchange swaps		Reporting dealers		Customers			
									Financial		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	(41)	48	(8)	290	(51)	347	(61)	141	(25)	79	(14)
1998	227	(29)	30	(4)	516	(67)	550	(71)	123	(16)	100	(13)
2001	217	(26)	45	(5)	571	(69)	534	(64)	198	(24)	101	(12)
2004	386	(34)	83	(7)	663	(59)	704	(62)	318	(28)	110	(10)
2007	273	(23)	86	(7)	837	(70)	661	(55)	422	(35)	113	(9)

Table 5: Currency distribution of traditional foreign exchange market turnover in Canada
Summary of surveys

Percent shares

Currency	April 1983	March 1986	April 1989	April 1992	April 1995	April 1998	April 2001	April 2004	April 2007
U.S. dollar	99.0	99.4	99.2	96.3	96.6	96.8	96.0	95.3	95.6
Canadian dollar	75.7	68.2	66.2	65.2	69.6	70.2	61.8	55.5	67.8
Euro ^a	--	--	--	--	--	--	15.7	17.7	11.7
German mark ^a	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
Japanese yen	2.9	4.2	7.3	5.8	6.0	7.3	8.7	9.4	5.4
Mexican peso ^b	--	--	--	--	--	--	0.5	1.9	3.9
Australian dollar ^b	--	--	--	--	--	1.0	2.3	4.2	3.5
Swiss franc	2.9	4.7	5.6	5.0	4.4	2.3	4.2	4.5	2.6
Hong Kong dollar ^b	--	--	--	--	--	--	0.2	1.4	0.5
Other currencies	2.0	1.8	2.5	3.8	3.0	2.9	2.8	2.3	2.0
All currencies ^c	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0

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

^b "--" indicates the currency was not broken out and reported separately

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

Table 6: Reported foreign exchange turnover in Canada in April 2007 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	90,923	14,591	4,675	9,665	28,373	6,987	155,212
Local	12,070	584	148	526	6,563	1,134	21,023
Cross-border	78,853	14,007	4,527	9,139	21,810	5,853	134,189
With financial customers	45,882	11,798	5,548	5,707	8,726	8,739	86,400
Local	19,409	448	243	447	361	3,085	23,993
Cross-border	26,473	11,350	5,305	5,260	8,365	5,654	62,407
With non-financial customers	25,735	1,213	596	419	943	2,557	31,463
Local	22,254	654	421	199	523	2,237	26,288
Cross-border	3,481	559	175	220	420	320	5,175
Outright forwards and FX swaps							
With reporting dealers	324,388	58,124	36,387	20,019	56,004	11,178	506,099
Local	83,506	9,262	2,432	2,177	2,531	6,616	106,523
Cross-border	240,882	48,862	33,955	17,842	53,473	4,562	399,576
With financial customers	216,904	19,993	21,916	17,819	39,037	19,991	335,660
Local	118,185	4,103	832	5,109	2,770	18,604	149,603
Cross-border	98,719	15,890	21,084	12,710	36,267	1,387	186,057
With non-financial customers	63,441	5,669	1,378	1,263	3,344	6,548	81,643
Local	49,579	3,294	800	1,177	1,658	5,881	62,389
Cross-border	13,862	2,375	578	86	1,686	667	19,254
Summary by instruments							
Total spot	162,540	27,602	10,819	15,791	38,042	18,283	273,075
(Currency share, per cent)	(59.5)	(10.1)	(4.0)	(5.8)	(13.9)	(6.7)	(100.0)
Total outright forwards and FX swaps	604,733	83,786	59,681	39,101	98,385	37,717	923,402
(Currency share, per cent)	(65.5)	(9.1)	(6.5)	(4.2)	(10.7)	(4.1)	(100.0)
Summary by counterparty							
Reporting dealers							
Spot	90,923	14,591	4,675	9,665	28,373	6,987	155,212
Outright forwards and FX swaps	324,388	58,124	36,387	20,019	56,004	11,178	506,099
Total reporting dealers	415,311	72,715	41,062	29,683	84,377	18,165	661,311
(Currency share, per cent)	(62.8)	(11.0)	(6.2)	(4.5)	(12.8)	(2.7)	(100.0)
Customers							
Spot	71,617	13,011	6,144	6,126	9,669	11,296	117,863
Outright forwards and FX swaps	280,345	25,662	23,294	19,082	42,381	26,539	417,303
Total customer	351,962	38,673	29,438	25,208	52,050	37,835	535,166
(Currency share, per cent)	(65.8)	(7.2)	(5.5)	(4.7)	(9.7)	(7.1)	(100.0)
Total turnover	767,273	111,388	70,500	54,891	136,427	56,000	1,196,477
(Currency share, per cent)	(64.1)	(9.3)	(5.9)	(4.6)	(11.4)	(4.7)	(100.0)

Table 7: Reported foreign exchange market turnover in Canada by maturity^a

Millions of U.S. dollars

Instrument	1995		1998		2001		2004		2007	
	Amounts	% share	Amounts	% share	Amounts	% share	Amounts	% share	Amounts	% share
Outright forwards										
Up to 7 days	26,485	48.2	10,045	30.5	18,103	38.4	28,679	33.7	35,172	37.1
Over 7 days and up to 1 year	26,621	48.4	20,224	61.4	27,675	58.8	52,377	61.6	57,853	61.0
Over one year	1,850	3.4	2,656	8.1	1,306	2.8	3,995	4.7	1,851	2.0
Total	54,956	100.0	32,925	100.0	47,084	100.0	85,051	100.0	94,876	100.0
Foreign exchange swaps										
Up to 7 days	221,465	65.4	458,098	72.2	445,261	70.1	548,093	76.6	699,368	74.8
Over 7 days and up to 1 year	109,226	32.2	168,461	26.6	177,050	27.9	160,716	22.5	231,639	24.8
Over one year	7,937	2.4	7,668	1.2	12,793	2.0	6,605	0.9	4,042	0.4
Total	338,628	100.0	634,227	100.0	635,104	100.0	715,414	100.0	935,049	100.0

^a Not adjusted for local double counting.

Table 8: Foreign exchange transactions in Canada in April 2007 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	Australian dollar	Swiss franc	Other	Total
Spot	3,464	1,102	960	1,399	229	350	7,503
Outright forwards	3,955	2,044	2,419	2,506	1,953	695	13,571
FX swaps	9,263	7,051	2,137	514	841	659	20,464
Total turnover	16,682	10,196	5,516	4,418	3,023	1,703	41,537
Currency share (per cent)	(40.2)	(24.5)	(13.3)	(10.6)	(7.3)	(4.1)	(100.0)

Table 9: Geographical distribution of global traditional foreign exchange market turnover
Daily averages in billions of U.S. dollars and percent shares

Country	April 2001		April 2004		April 2007		Per cent growth 2007/2004
	Amount	% Share	Amount	% Share	Amount	% Share	
Canada	41.6	2.6	53.9	2.2	59.8	1.5	10.9
United Kingdom	504.4	31.2	753.0	31.2	1359.1	34.1	80.5
United States	253.7	15.7	461.3	19.2	663.6	16.6	43.9
Switzerland	70.8	4.4	78.2	3.3	241.7	6.1	209.1
Japan	146.8	9.1	198.9	8.3	238.4	6.0	19.9
Singapore	100.7	6.2	125.4	5.2	230.5	5.8	83.8
Hong Kong	66.8	4.1	102.2	4.2	174.6	4.4	70.8
Australia	51.9	3.2	80.8	3.4	169.5	4.3	109.8
France	48.0	3.0	64.0	2.7	119.7	3.0	87.0
Germany	88.5	5.5	117.5	4.9	98.7	2.5	-16.0
Denmark	23.3	1.4	40.9	1.7	86.1	2.2	110.5
Russia	9.6	0.6	29.8	1.2	50.2	1.3	68.5
Belgium	10.1	0.6	19.7	0.8	48.2	1.2	144.7
Luxembourg	12.9	0.8	14.5	0.6	42.6	1.1	193.8
Sweden	24.1	1.5	30.8	1.3	42.2	1.1	37.0
Italy	17.0	1.0	20.0	0.8	35.6	0.9	78.0
India	3.0	0.2	6.6	0.3	34.1	0.9	416.7
Korea	9.6	0.6	19.8	0.8	33.4	0.8	68.7
Norway	12.8	0.8	14.4	0.6	31.9	0.8	121.5
Netherlands	30.0	1.9	48.9	2.0	23.8	0.6	-51.3
Austria	8.0	0.5	13.3	0.6	17.8	0.4	33.8
Spain	7.6	0.5	13.6	0.6	16.3	0.4	19.9
Mexico	8.6	0.5	14.6	0.6	15.2	0.4	4.1
Taiwan	4.3	0.3	8.3	0.3	14.6	0.4	75.9
South Africa	9.8	0.6	9.7	0.4	13.9	0.3	43.3
New Zealand	3.9	0.2	6.9	0.3	12.3	0.3	78.3
Ireland	8.3	0.5	7.1	0.3	10.5	0.3	47.9
Poland	8.0	0.5	6.4	0.3	8.8	0.2	37.5
Finland	1.6	0.1	1.8	0.1	8.2	0.2	355.6
Israel	0.7	-	4.8	0.2	7.9	0.2	64.6
Greece	4.8	0.3	4.2	0.2	4.9	0.1	16.7
Portugal	1.7	0.1	1.9	0.1	3.3	0.1	73.7
Other countries	25.0	1.5	33.6	1.4	70.7	1.8	110.4
Total	1,617.9	100.0	2,408.0	100.0	3,988.1	100.0	65.6

Source: Bank for International Settlements, Triennial Central Bank Surveys. The data are adjusted for local (but not cross-border) double counting arising from business between reporting dealers

Table 10: Currency distribution of global traditional foreign exchange market turnover^a
 Percent shares of average daily turnover

Currency	April 1989	April 1992	April 1995	April 1998	April 2001	April 2004	April 2007
U.S. dollar	90.0	82.0	83.3	87.3	90.3	88.7	86.3
Euro	--	--	--	--	37.6	37.2	37.0
German mark ^b	27.0	39.6	36.1	30.1	--	--	--
French franc	2.0	3.8	7.9	5.1	--	--	--
ECU and other EMS currencies	4.0	11.8	15.7	17.3	--	--	--
Japanese yen	27.0	23.4	24.1	20.2	22.7	20.3	16.5
U.K. pound	15.0	13.6	9.4	11.0	13.2	16.9	15.0
Swiss franc	10.0	8.4	7.3	7.1	6.1	6.1	6.8
Australian dollar	2.0	2.5	2.7	3.1	4.2	5.5	6.7
Canadian dollar	1.0	3.3	3.4	3.6	4.5	4.2	4.2
Other currencies	22.0	11.6	10.1	15.2	21.4	21.1	27.5
All currencies^c	200.0	200.0	200.0	200.0	200.0	200.0	200.0

^a The percentages relate to turnover that has been adjusted for both local and cross-border double counting between reporting dealers, except for the 1989 data which are unadjusted

^b Data for April 1989 exclude domestic trading involving the German mark in Germany.

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

Table 11: Global trading of the Canadian dollar
Percent share of total^a

Country	April 1992	April 1995	April 1998	April 2001	April 2004	April 2007
Canada	40.1	41.3	37.7	35.4	30.0	24.5
United States	19.0	18.6	18.8	25.4	29.2	28.5
United Kingdom	18.3	22.4	23.3	25.9	23.2	25.6
Singapore	5.7	5.5	7.8	3.5	2.2	4.5
Japan	8.8	2.4	1.9	1.3	3.7	3.5
France	0.7	0.7	0.5	1.7	1.7	2.9
Switzerland	1.5	2.6	1.9	0.6	1.3	2.8
Australia	0.5	0.7	0.5	1.9	2.8	2.4
Hong Kong	5.3	2.9	2.0	0.9	1.4	1.3
Ireland	--	0.0	0.1	0.2	0.2	0.8
Germany	--	1.4	0.8	0.8	1.1	0.7
Sweden	0.1	0.1	0.3	0.4	0.2	0.3
Netherlands	--	0.3	0.2	0.2	0.9	0.3
Luxembourg	--	0.6	1.2	0.4	0.4	0.3
Denmark	--	0.1	0.2	0.3	0.3	0.2
Belgium	--	--	2.3	0.2	0.5	0.2
Other	0.1	0.4	0.5	0.9	0.9	1.2
Total	100.1	100.0	100.0	100.0	100.0	100.0

^a "--" indicates the data was not reported.

Table 12: 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 2004	April 2007	Per cent growth	April 2004	April 2007	Per cent growth	April 2004	April 2007	Per cent growth	April 2004	April 2007	Per cent growth
Forward rate agreements	25,405	11,424	-55.0	37,542	93,093	148.0	8,542	19,308	126.0	71,489	123,824	73.2
Reporting dealers	22,775	4,816	-78.9	33,803	17,501	-48.2	8,542	1,637	-80.8	65,120	23,953	-63.2
Financial customers	1,914	5,282	176.0	3,408	70,658	1973.3	--	17,456	--	5,322	93,396	1654.9
Non-financial customers	716	1,326	85.2	331	4,934	1390.6	--	215	--	1,047	6,475	518.4
Interest rate swaps	70,237	143,089	103.7	32,976	57,844	75.4	49,347	14,563	-70.5	152,560	215,495	41.3
Reporting dealers	43,271	98,777	128.3	24,961	41,577	66.6	45,326	8,018	-82.3	113,558	148,371	30.7
Financial customers	11,648	19,336	66.0	4,822	12,845	166.4	1,055	3,284	211.3	17,525	35,465	102.4
Non-financial customers	15,318	24,976	63.1	3,193	3,422	7.2	2,966	3,261	9.9	21,477	31,659	47.4
OTC options	12,346	44,945	264.0	17,230	24,484	42.1	845	2,894	242.5	30,421	72,323	137.7
Reporting dealers	8,759	24,482	179.5	11,685	8,731	-25.3	845	165	-80.5	21,289	33,378	56.8
Financial customers	2,965	14,938	403.8	4,160	13,825	232.3	--	2,544	--	7,125	31,307	339.4
Non-financial customers	622	5,525	788.3	1,385	1,928	39.2	--	185	--	2,007	7,638	280.6
Total reporting dealers	74,805	128,075	71.2	70,449	67,808	-3.7	54,713	9,819	-82.1	199,967	205,702	2.9
Total customers	33,183	71,383	115.1	17,299	107,612	522.1	4,021	26,945	570.1	54,503	205,940	277.9
Financial	16,527	39,556	139.3	12,390	97,328	685.5	1,055	23,284	2107.0	29,972	160,168	434.4
Non-financial	16,656	31,827	91.1	4,909	10,284	109.5	2,966	3,661	23.4	24,531	45,772	86.6
Local	53,338	85,606	60.5	3,136	20,533	554.8	116	9,947	8475.0	56,590	116,086	105.1
Cross border	54,650	113,852	108.3	84,612	154,887	83.1	58,618	26,817	-54.3	197,880	295,556	49.4
Total turnover	107,988	199,458	84.7	87,748	175,420	99.9	58,734	36,764	-37.4	254,470	411,642	61.8

Table 13: Geographical distribution of global OTC derivatives turnover
Daily averages in billions of U.S. dollars and percent shares

Country	April 2004				April 2007				Per cent growth
	Foreign Exchange ^a	Interest rates ^b	Total	% Share	Foreign Exchange ^a	Interest rates ^b	Total	% Share	
Canada	5.4	12.1	17.5	1.2	4.2	20.6	24.8	1.0	41.7
United Kingdom	80.4	563.0	643.4	42.7	124.1	957.1	1,081.2	43.9	68.0
United States	37.4	317.4	354.8	23.5	81.6	525.0	606.6	24.6	71.0
France	2.5	151.3	153.8	10.2	6.9	174.4	181.3	7.4	17.9
Germany	2.9	42.8	45.7	3.0	2.7	90.2	92.9	3.8	103.3
Japan	8.5	30.9	39.4	2.6	11.8	76.4	88.2	3.6	123.9
Switzerland	6.2	12.0	18.2	1.2	11.9	60.7	72.6	2.9	298.9
Singapore	8.4	8.6	17.0	1.1	11.2	57.4	68.6	2.8	303.5
Italy	3.5	37.9	41.4	2.7	2.0	29.8	31.8	1.3	-23.2
Australia	4.9	12.8	17.7	1.2	6.8	22.7	29.5	1.2	66.7
Netherlands	3.1	18.8	21.9	1.5	1.1	27.0	28.1	1.1	28.3
Belgium	1.1	30.5	31.6	2.1	1.9	21.6	23.5	1.0	-25.6
Hong Kong	3.8	11.3	15.1	1.0	6.3	17.3	23.6	1.0	56.3
Spain	0.4	11.9	12.3	0.8	0.9	16.8	17.7	0.7	43.9
Sweden	1.0	7.4	8.4	0.6	1.8	12.3	14.1	0.6	67.9
Denmark	1.2	10.8	12.0	0.8	2.1	10.0	12.1	0.5	0.8
India	0.2	0.8	1.0	0.1	4.3	3.4	7.7	0.3	670.0
Ireland	0.5	12.4	12.9	0.9	0.9	7.2	8.1	0.3	-37.2
Norway	--	5.2	5.2	0.3	0.2	6.6	6.8	0.3	30.8
Korea	0.7	0.9	1.6	0.1	1.8	5.4	7.2	0.3	350.0
Austria	1.3	13.5	14.8	1.0	1.0	4.9	5.9	0.2	-60.1
Luxembourg	0.1	7.3	7.4	0.5	1.3	3.4	4.7	0.2	-36.5
South Africa	0.1	3.0	3.1	0.2	0.1	4.5	4.6	0.2	48.4
Other Countries	3.7	8.1	11.8	0.8	6.0	16.6	22.6	0.9	91.5
Total	177.3	1,330.7	1,508.0	100.0	292.9	2,171.3	2,464.2	100.0	63.4

^a Foreign exchange derivatives include currency swaps and OTC options.

^b Interest rate derivatives include forward rate agreements, interest rate swaps and OTC options

Source: Bank for International Settlements, Triennial Central Bank Surveys. The data are adjusted for local (but not cross-border) double counting arising from business between reporting dealers.

Table 14: Execution methods for foreign exchange contracts
Percentage share of total transactions, April 2007

	Execution method						Total
	Interdealer direct	Customer direct	Electronic broking systems ^a	Electronic trading systems ^b		Voice broker	
				Multi-bank dealing systems	Single-bank proprietary platforms		
Instrument							
Spot	36	21	30	2	3	8	100
Outright forwards	29	47	10	9	4	1	100
Foreign exchange swaps	31	24	29	2	1	14	100
Options	14	10	72	0	0	5	100
Total	31	24	30	2	2	11	100
Counterparty							
With reporting dealers	53	-- ^d	35	2	1	10	100
With other financial institutions	- ^c	53	26	2	2	16	100
With non-financial customers	- ^c	86	4	3	5	2	100
Total	31	24	30	2	2	11	100

^a Trades executed via automated order-matching systems for foreign exchange dealers.

^b Electronic trading systems generally geared towards customers. In multi-bank dealing systems, various banks provide liquidity to the system. On single-bank proprietary platforms, the primary liquidity provider is a single bank, e.g., a bank's own internet-based system or the platform of another bank.

^c No customer data by definition.

^d No reporting dealer data by definition.

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

Instrument	Principal amounts outstanding		Gross markets values	
	End-June 2004	End-June 2007	End-June 2004	End-June 2007
Foreign exchange derivatives				
Outright forwards & FX swaps	1,000.4	1,659.4		
Currency swaps	398.8	515.8		
Options	258.8	159.7		
Total	1,658.0	2,335.0	73.8	107.2
Interest rate derivatives				
FRAs	583.3	287.8		
Swaps	2,973.9	5,078.0		
Options	473.5	695.6		
Total	4,030.7	6,061.4	93.2	97.1
Equity and stock index derivatives				
Forwards and swaps	52.6	119.7		
Options	39.8	137.1		
Total	92.4	256.8	9.3	36.3
Commodity and precious metal derivatives (excluding Gold)	87.8	255.4	8.1	19.1
Credit derivatives	217.6	816.0	2.2	9.6
Other derivatives	8.9	19.7	0.3	0.4
Total derivatives	6,095.4	9,744.2	186.9	269.8

Table 16: Foreign exchange derivatives reported by Canadian financial institutions
Principal amounts outstanding and gross market values
as at 30 June 2007
 Billions of U.S. dollars

Currency	Principal amounts outstanding				Gross market values
	Outright forwards and FX swaps	Currency swaps	OTC options	Total	
Canadian dollar	780.3	273.8	66.6	1,120.6	71.5
U.S. dollar	1,553.1	448.9	154.5	2,156.4	97.6
Euro	300.0	151.3	23.4	474.7	13.3
Japanese yen	159.1	20.2	58.5	237.9	9.3
U.K. pound	233.9	64.1	2.6	300.6	6.4
Swiss franc	26.6	6.2	0.4	33.2	0.8
Other	265.8	67.1	13.5	346.5	15.7
Total^a	1,659.4	515.8	159.7	2,335.0	107.2
By maturity:					
Up to 1 year	1,441.2		129.8	1,571.0	
Over 1 year to 5 years	487.7		27.8	515.5	
Over 5 years	246.4		2.2	248.5	

^a 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 30 June 2007**
Billions of U.S. dollars

Currency	Principal amounts outstanding				Gross market values
	Forward rate agreements	Interest rate swaps	OTC options	Total	
Canadian dollar	70.7	2,141.6	264.4	2,476.7	36.9
U.S. dollar	176.8	1,587.8	328.0	2,092.6	23.7
Euro	33.0	589.8	97.4	720.2	16.4
Japanese yen	0.2	157.2	1.0	158.5	1.9
U.K. pound	0.3	387.3	4.0	391.6	11.7
Swiss franc	0.1	6.2	0.1	6.4	0.2
Other	6.8	208.2	0.6	215.5	6.3
Total	287.8	5,078.0	695.6	6,061.4	97.1
By maturity:					
Up to 1 year		2,135.5	315.5	2,450.9	
Over 1 year to 5 years		2,200.1	235.8	2,435.9	
Over 5 years		1,030.2	144.3	1,174.5	

Table 18: Equity and stock index derivatives reported by Canadian financial institutions
Principal amounts outstanding and gross market values
as at 30 June 2007
 Billions of U.S. dollars

Nationality of issuer	Principal amounts outstanding			Gross market values
	Forwards and swaps	OTC options	Total	
Canadian	83.3	34.9	118.2	10.6
American (U.S.)	20.8	48.0	68.8	9.4
European	14.9	50.4	65.3	14.3
Japanese	0.3	2.9	3.2	1.1
Other	0.3	0.9	1.3	0.9
Total	119.7	137.1	256.8	36.3
By maturity:				
Up to 1 year	99.4	88.7	188.1	
Over 1 year to 5 years	17.5	43.3	60.8	
Over 5 years	2.8	5.1	7.9	

Table 19: All other derivatives reported by Canadian financial institutions
Principal amounts outstanding and gross market values
as at 30 June 2007

Billions of U.S. dollars

Instrument	Principal amounts outstanding			Gross market values
	Forwards and swaps	OTC options	Total	
Commodities and precious metals (excluding Gold)	76.6	178.7	255.4	19.1
Credit	762.2	53.8	816.0	9.6
Other	16.4	3.3	19.7	0.4

Table 20: Credit default swaps reported by Canadian financial institutions
Principal amounts outstanding and gross market values
as at 30 June 2007
 Billions of U.S. dollars

Instrument	Principal Amounts Outstanding						Gross Market Values
	Total		Sovereign		Non-Sovereign		
	Bought	Sold	Bought	Sold	Bought	Sold	
Single - name							
With reporting dealers	121.2	139.6	3.1	3.8	118.1	135.7	
With other financial institutions	117.8	97.1	2.0	1.1	115.8	96.0	
With non-financial customers	5.2	12.4	0.0	0.0	5.2	12.4	
Total	244.2	249.1	5.0	5.0	239.1	244.1	7.4
Multi - name^a							
With reporting dealers	66.5	79.2					
With other financial institutions	33.6	51.1					
With non-financial customers	8.5	16.4					
Total	108.7	146.6					8.9
Total CDS	352.8	395.7					16.3

^a A breakdown of multi-name instruments into sovereign and non-sovereign was not requested of the triennial survey participants.