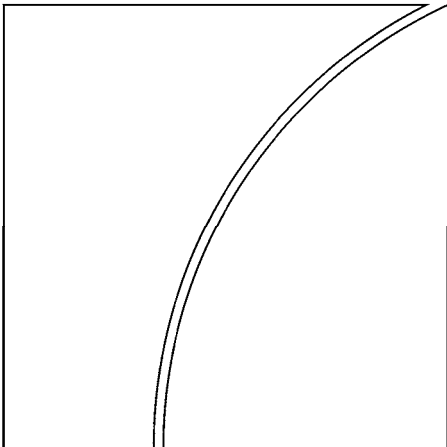




BANK FOR INTERNATIONAL SETTLEMENTS



OTC derivatives market activity in the second half of 2010

Monetary and Economic Department

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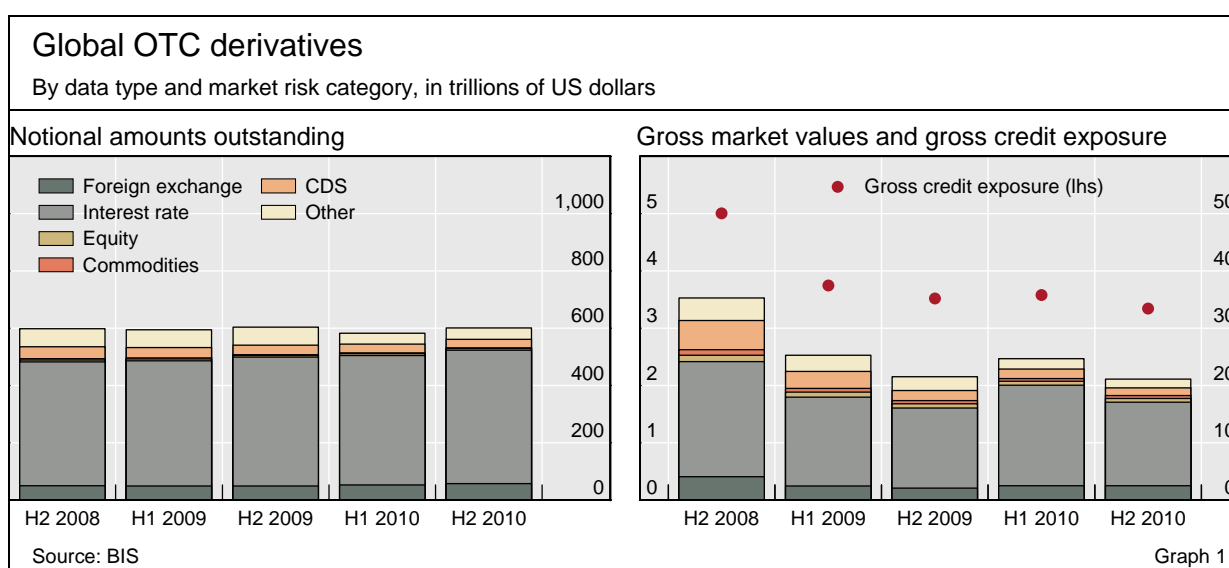
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I. OTC market developments in the second half of 2010

After contracting by 4% in the first half of 2010, total notional amounts outstanding of over-the-counter (OTC) derivatives rose by 3% in the second half, reaching \$601 trillion by the end of December 2010 (Graph 1, left-hand panel, and Table 1). Notional amounts outstanding of credit default swaps (CDS) continued to contract, falling by 1% after the 7% decline in the first half, while outstanding equity-linked contracts shrank by 10%. *Gross market values*¹ of all OTC contracts went down by 14%, driven mainly by the 17% decline in the market value of interest rate contracts. CDS market values fell by 19%. *Overall gross credit exposure*² dropped by 7% to \$3.3 trillion, compared with a 2% increase in the first half of 2010.



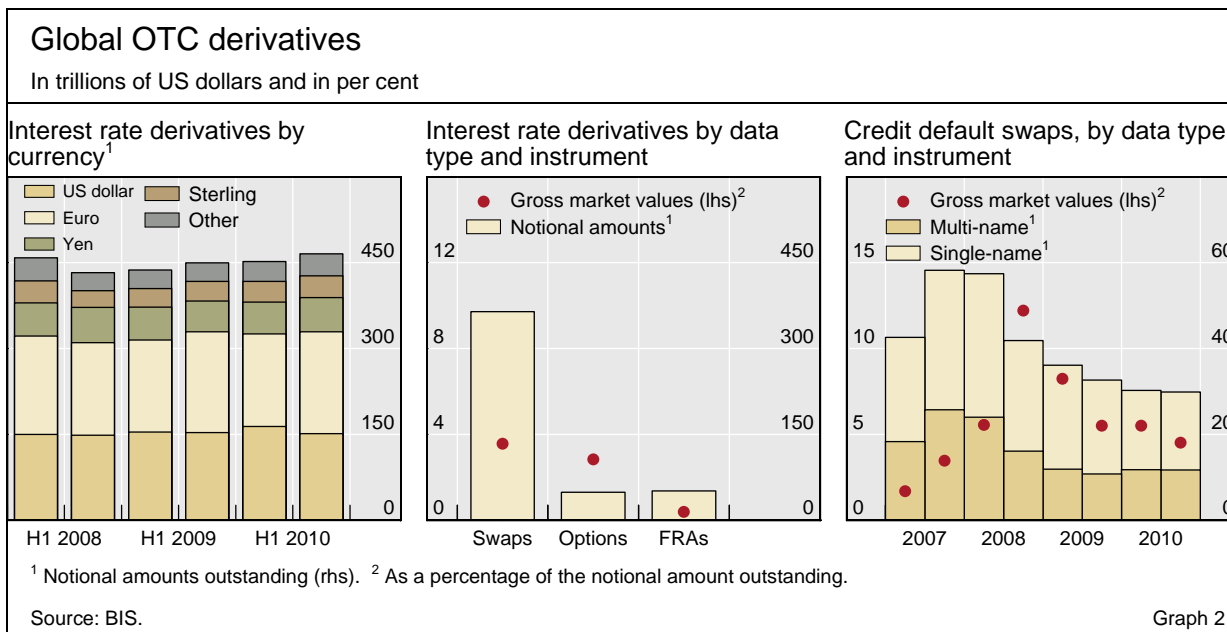
1.1 Interest rate and foreign exchange derivatives

- *OTC interest rate derivatives (Table 3)*: In the largest risk category in the OTC derivatives market by any measure, notional amounts outstanding increased by 3% in the second half of 2010. Contracts on dollar rates dropped by 8%. Positions in the euro (10%), the yen (7%), the Swiss franc (10%) and the Swedish krona (14%) went up, but this probably reflected the appreciation of those currencies against the US dollar more than any genuine increase in activity. Only the Canadian dollar segment showed a decline of about 4%, despite the currency's 6% appreciation. Overall interest rate derivative market values fell by around 17%, possibly reflecting the convergence of interest rate expectations with the interest rates locked into contracts.

¹ Gross market values, which measure the cost of replacing all existing contracts, provide a measure of market risk.

² Gross credit exposures take into account legally enforceable bilateral netting agreements. Excluding CDS contracts for all countries except the United States.

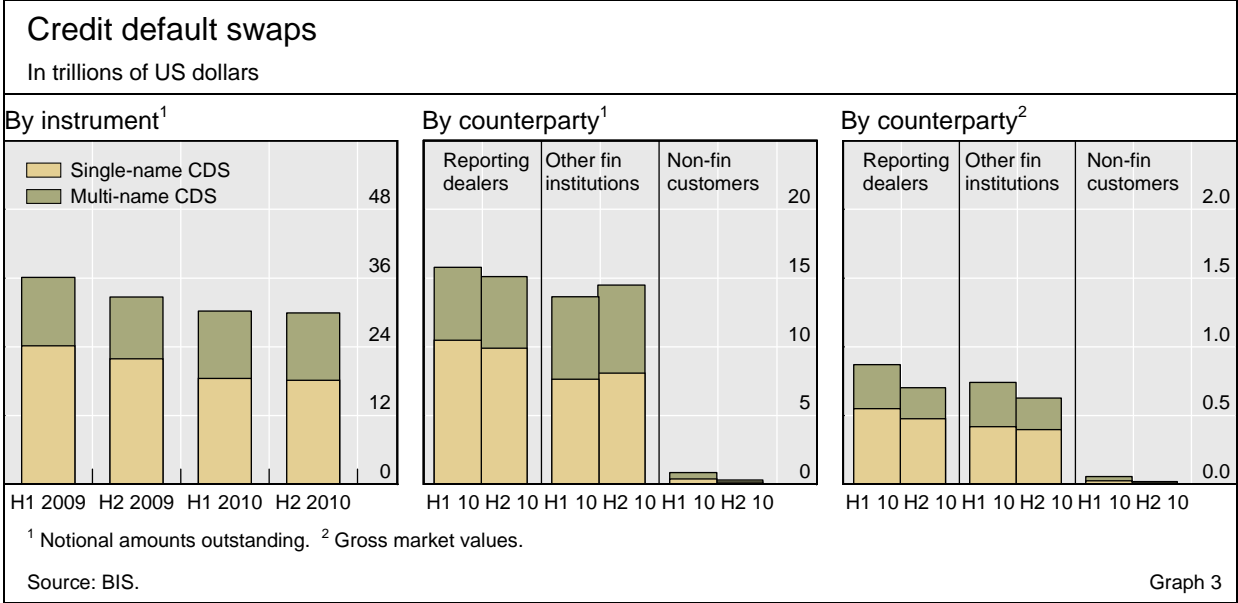
- *FX derivatives (Table 2):* The notional amounts of FX derivatives increased by 9%, with the focus on short-term maturities (+13%), although outstanding options dropped by 10%. Gross market values remained largely unchanged. The exceptions were instruments on the euro, where market values contracted by 21% despite the currency's appreciation against the US dollar, and on the Swiss franc (where market values rose by 55%, after the 101% increase in the first half of 2010.)



1.2 Credit default swaps

- Overall CDS amounts outstanding levelled off in the second part of 2010 (-1%). Amounts outstanding with CCPs increased from about 10% of the total market at end-June to 15% at end-December 2010.³ Positions with other reporting dealers dropped by 4%, and with non-financial customers by 63% (after a 46% decline in the first half) to stand at \$310 billion, representing only 1% of the market compared with the previous peak of 5%, reached at the end of December 2009 (Graph 3).
- Gross market values fell by 19%, reflecting declines of 11% for single-name CDS, and of 31% for multi-name contracts. These followed a decline of 20% and an increase of 21% respectively in the previous half. With the exception of contracts with CCPs (+23%), market values also decreased with other counterparties such as SPVs (-26%) and banks and securities firms (-20%).
- The sovereign CDS market bucked the downward trend in notional amounts, posting a 6% increase. This followed a 26% gain during the first half of 2010. Positions in non-sovereign CDS declined by 2% in the second half of the year (after a 7% contraction in the previous period).
- With regard to the maturity structure, notional amounts did not change much in the shorter segment, while there was a clear drop in the long-term (five years and over) component (-15%).

³ Counting each CCP contract once, rather than halving them (see Section 2.4 for more details).



1.3 Equity and commodity derivatives

- *Equity derivatives*: Notional amounts outstanding of equity-linked contracts declined by 10%. Positions in equity-linked options fell by 16%, while those in forwards and swaps increased by 4%. Market values at end-2010 were uniformly down, by 11% in forwards and swaps and by 7% in options.
- *Commodity derivatives*: Amounts outstanding grew by 2%, driven mainly by a 15% increase in forwards and swaps contracts on precious metals and other commodities.

1.4 Concentration indices

- According to Herfindahl indices calculated on the basis of responses from individual dealers, concentration was largely unchanged in most sectors. In the interest rate segment, however, concentration increased in options on the Canadian dollar and Swedish krona, as well as in FRAs in Swiss francs (Table 6a). Increased concentration was measured in forwards and swaps linked to Latin American equities (Table 6c).

II. Statistical notes

1. Coverage

As of end-June 1998, the central banks of the eleven reporting countries⁴ introduced reporting by leading global dealers as a regular feature in the collection of statistics on derivatives markets. The aim is to obtain reasonably comprehensive and internationally consistent information on the size and structure of over-the-counter (OTC) derivatives markets.

The semiannual OTC derivatives market statistics (Tables 1 to 3) provide data on notional amounts and gross market values outstanding for forwards, swaps and options on foreign exchange, interest rate, equity and commodity derivatives. All published figures are adjusted for double-counting of positions between reporting institutions. Notional amounts outstanding are adjusted by halving positions vis-à-vis other reporting dealers. Total gross market values are calculated by adding all reporters' contracts with positive market value to the absolute value of reporters' contracts with non-reporting counterparties that have negative market value.

As of end-June 2004, the BIS began releasing statistics on concentration measures in the context of the semiannual OTC derivatives statistics. The central banks of the eleven reporting countries provided the BIS with data back to June 1998, including concentration measures for foreign exchange, interest rate and equity-linked derivatives (Tables 6a to 6i).

In response to a request from the Committee on the Global Financial System (CGFS), as of end-December 2004 the BIS began releasing semiannual statistics on credit default swaps (CDS) (Tables 4 and 5). These include notional amounts outstanding and gross market values for single- and multi-name instruments. As of December 2005, additional information by counterparty, sector and rating has been made available.

2. Definitions

2.1 Reporting basis

Data on amounts outstanding are collected and reported on a consolidated basis. This means that data from all branches and (majority-owned) subsidiaries worldwide of a given institution are aggregated and reported by the parent institution to the official monetary authority in the country where the parent institution has its head office. Deals between affiliates (ie branches and subsidiaries) of the same institution are excluded from the reporting.

2.2 Types of data collected

Notional amounts outstanding: Nominal or notional amounts outstanding are defined as the gross nominal or notional value of all deals concluded and not yet settled on the reporting date. For contracts with *variable nominal or notional principal amounts*, the basis for reporting is the nominal or notional principal amounts at the time of reporting.

⁴ Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, the United Kingdom and the United States. From December 2011, Australia and Spain are expected to contribute to the semiannual survey, bringing to 13 the number of reporting countries.

Nominal or notional amounts outstanding provide a measure of market size and a reference from which contractual payments are determined in derivatives markets. However, such amounts are generally not those truly at risk. The amounts at risk in derivatives contracts are a function of the price level and/or volatility of the financial reference index used in the determination of contract payments, the duration and liquidity of contracts, and the creditworthiness of counterparties. They are also a function of whether an exchange of notional principal takes place between counterparties. Gross market values provide a more accurate measure of the scale of financial risk transfer taking place in derivatives markets.

Gross positive and negative market values: Gross market values are defined as the sums of the absolute values of all open contracts with either positive or negative replacement values evaluated at market prices prevailing on the reporting date. Thus, the gross positive market value of a dealer's outstanding contracts is the sum of the replacement values of all contracts that are in a current gain position to the reporter at current market prices (and therefore, if they were settled immediately, would represent claims on counterparties). The gross negative market value is the sum of the values of all contracts that have a negative value on the reporting date (ie those that are in a current loss position and therefore, if they were settled immediately, would represent liabilities of the dealer to its counterparties).

The term "gross" indicates that contracts with positive and negative replacement values with the same counterparty are not netted. Nor are the sums of positive and negative contract values within a market risk category such as foreign exchange contracts, interest rate contracts, equities and commodities set off against one another.

As stated above, gross market values supply information about the potential scale of market risk in derivatives transactions. Furthermore, gross market value at current market prices provides a measure of economic significance that is readily comparable across markets and products.

Current credit exposure and liabilities: Current credit exposure represents the gross value of contracts that have a positive market value after taking account of legally enforceable bilateral netting agreements. Liabilities arising from OTC derivatives contracts represent the gross value of contracts that have a negative market value taking account of legally enforceable bilateral netting agreements.

Herfindahl index: The Herfindahl index represents a measure of market concentration and is defined as the sum of the squares of the market shares of each individual institution. It ranges from 0 to 10,000. The more concentrated the market, the higher the measure becomes. If the market is fully concentrated (only one institution) the measure will have the (maximum) value of 10,000.

2.3 Instrument types

Forward contracts: Forward contracts represent agreements for delayed delivery of financial instruments or commodities in which the buyer agrees to purchase and the seller agrees to deliver, at a specified future date, a specified instrument or commodity at a specified price or yield. Forward contracts are generally not traded on organised exchanges and their contractual terms are not standardised. The reporting exercise also includes transactions where only the difference between the contracted forward outright rate and the prevailing spot rate is settled at maturity, such as non-deliverable forwards (ie forwards which do not require physical delivery of a non-convertible currency) and other contracts for differences.

Swaps: Swaps are transactions in which two parties agree to exchange payment streams based on a specified notional amount for a specified period. Forward-starting swap contracts are reported as swaps.

Options: Option contracts confer either the right or the obligation, depending upon whether the reporting institution is the purchaser or the writer, respectively, to buy or sell a financial instrument or commodity at a specified price up to a specified future date.

Specific definitions for credit default swaps

Single-name CDS: A credit derivative where the reference entity is a single name.

Multi-name CDS: A contract where the reference entity is more than one name, as in portfolio or basket CDS or CDS indices. A basket CDS is a CDS where the credit event is the default of some combination of the credits in a specified basket of credits.

Index products: Multi-name credit default swap contracts with constituent reference credits and a fixed coupon that are determined by an administrator such as Markit (which administers the CDX indexes and the iTraxx indexes). Index products include tranches of credit default swap indexes.

2.4 Counterparties and elimination of double-counting

Reporting institutions are requested to provide for each instrument in the foreign exchange, interest rate, equity and credit derivatives risk categories a breakdown of contracts by counterparty as follows: reporting dealers, other financial institutions and non-financial customers.

Reporting dealers: Institutions whose head office is located in one of the eleven reporting countries (Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, the United Kingdom and the United States)⁵ and which participate in the semiannual OTC derivatives market statistics; in addition, reporting dealers include all branches and subsidiaries of these entities worldwide; “reporting dealers” will mainly be commercial and investment banks and securities houses, including their branches and subsidiaries and other entities that are active dealers.

Other financial institutions: Financial institutions *not* classified as reporting dealers, including central counterparties (CCP), banks, funds and non-bank financial institutions which may be considered as financial end-users (eg mutual funds, pension funds, hedge funds, currency funds, money market funds, building societies, leasing companies, insurance companies, central banks).

In the specific case of the *credit default swaps* the counterparty item “other financial institutions” is broken further down into the following subcategories:

- Banks and securities firms: smaller commercial banks, investment banks and securities houses that do not participate in the survey.
- Central counterparties (CCPs): Entities that interpose themselves between counterparties, becoming the buyer to every seller and the seller to every buyer.
- Insurance firms (including pension funds⁶), reinsurance and financial guaranty firms.
- Special purpose vehicles, special purpose corporations and special purpose entities: Legal entities that are established for the sole purpose of carrying out single transactions, such as in the context of asset securitisation through the issuance of asset-backed and mortgage-backed securities.

⁵ From December 2011, Australia and Spain are expected to contribute to the semiannual survey, bringing to 13 the number of reporting countries.

⁶ As a general rule, pension funds are included under insurance firms. However, if they do not offer savings schemes involving an element of risk sharing linked to life expectancy they are more akin to mutual funds and are therefore included under “other financial customers”.

- Hedge funds: Mainly unregulated investment funds that typically hold long or short positions in commodity and financial instruments in many different markets according to a predetermined investment strategy and that may be highly leveraged.
- Other financial customers: All remaining financial institutions that are not listed above. In practice, they are mainly mutual funds.

Non-financial customer: Any counterparty other than those described above, in practice mainly corporate firms and governments.

Elimination of inter-dealer double-counting

Double-counting arises because transactions between two reporting entities are recorded by each of them, ie twice. In order to derive meaningful measures of overall market size, it is therefore necessary to halve the data on transactions between reporting dealers. To allow for this, reporters are asked to identify and report separately deals contracted with other reporters. The following methods of adjustment are applied for the three different types of data (see Section 2.1) collected in the survey:

- (1) Amounts outstanding data: Double-counting is eliminated by deducting half of the amount reported under the counterparty category “reporting dealers”.
- (2) Gross market values: The gross negative market value of contracts with other reporting dealers is subtracted from the total gross market value data in order to obtain the adjusted aggregates.
- (3) Gross credit exposures: Similarly to the adjustment performed for the gross market values, the gross negative credit exposures, ie liabilities, vis-à-vis other reporting dealers are subtracted from the total gross credit exposures in order to correct the reported aggregates for inter-dealer double-counting.

Effect of central clearing activities on the statistics

A central counterparty (CCP) is an entity that interposes itself between counterparties to contracts traded in one or more financial markets, becoming the buyer to every seller and the seller to every buyer. When a derivative contract between two reporting dealers is cleared by a CCP, this contract is replaced, in an operation called novation, with two new contracts: one between counterparty A and the CCP and a second between the CCP and counterparty B. As the BIS data records all outstanding positions, it would capture both the contracts in this example. This measure of the market size, ie a measure that captures all outstanding contracts, may be appropriate for gauging counterparty risk, given that any outstanding contract could potentially be defaulted on. However, this approach overstates the size of the derivatives market if used to proxy other aspects, such as the transfer of underlying risks, for which a single counting of the centrally cleared contracts would be more appropriate.

3. Data availability and next publication date

Detailed tables on OTC derivatives and concentration measures from end-June 1998 are available, with their main breakdowns, at www.bis.org/statistics/derstats.htm on the BIS website.

These published data may be subject to revisions. In most cases such revisions are likely to be minor. Should significant revisions occur, users will be informed of the revisions on the BIS website.

The next OTC derivatives statistics with additional information on CDS, covering the first half of 2011, will be released no later than **15 November 2011**.

III. Statistical tables

Table 1
Global OTC derivatives market¹
 Amounts outstanding, in billions of US dollars

	Notional amounts outstanding				Gross market value			
	H1 2009	H2 2009	H1 2010	H2 2010	H1 2009	H2 2009	H1 2010	H2 2010
GRAND TOTAL	594,553	603,900	582,655	601,048	25,298	21,542	24,673	21,148
A. Foreign exchange contracts	48,732	49,181	53,125	57,798	2,470	2,070	2,524	2,482
Outright forwards and forex swaps	23,105	23,129	25,625	28,434	870	683	925	886
Currency swaps	15,072	16,509	16,347	19,271	1,211	1,043	1,187	1,235
Options	10,555	9,543	11,153	10,092	389	344	411	362
<i>Memo: Exchange-traded contracts²</i>	225	292	347	314	...	...	...	...
B. Interest rate contracts³	437,228	449,875	451,831	465,260	15,478	14,020	17,533	14,608
FRAs	46,812	51,779	56,242	51,587	130	80	81	206
Swaps	341,903	349,288	347,508	364,378	13,934	12,576	15,951	13,001
Options	48,513	48,808	48,081	49,295	1,414	1,364	1,501	1,401
<i>Memo: Exchange-traded contracts²</i>	57,733	67,056	69,551	61,943	...	...	...	...
C. Equity-linked contracts	6,584	5,937	6,260	5,635	879	708	706	648
Forwards and swaps	1,678	1,652	1,754	1,828	225	176	189	167
Options	4,906	4,285	4,506	3,807	654	532	518	480
<i>Memo: Exchange-traded contracts²</i>	5,299	5,769	5,520	5,689	...	...	...	...
D. Commodity contracts⁴	3,619	2,944	2,852	2,922	682	545	457	526
Gold	425	423	417	396	43	48	44	47
Other	3,194	2,521	2,434	2,525	638	497	413	479
Forwards and swaps	1,715	1,675	1,551	1,781	...	...	...	...
Options	1,479	846	883	744	...	...	...	...
E. Credit default swaps⁵	36,098	32,693	30,261	29,898	2,973	1,801	1,666	1,351
Single-name instruments	24,165	21,917	18,494	18,145	1,950	1,243	993	884
Multi-name instruments	11,933	10,776	11,767	11,753	1,023	559	673	467
Index products	...	...	7,500	7,476	...	...	...	...
F. Unallocated⁶	62,291	63,270	38,327	39,536	2,816	2,398	1,788	1,532
GROSS CREDIT EXPOSURE⁷	...	...	...	...	3,744	3,521	3,578	3,342
<i>Memo: Exchange-traded contracts^{2,8}</i>	63,256	73,118	75,418	67,946	...	...	...	...

¹ All figures are adjusted for double-counting. Notional amounts outstanding have been adjusted by halving positions vis-à-vis other reporting dealers. Gross market values have been calculated as the sum of the total gross positive market value of contracts and the absolute value of the gross negative market value of contracts with non-reporting counterparties. ² Sources: FOW TRADEdata; Futures Industry Association; various futures and options exchanges. ³ Single currency contracts only. ⁴ Adjustments for double-counting partly estimated. ⁵ See Tables 4 and 5. ⁶ Includes foreign exchange, interest rate, equity, commodity and credit derivatives of non-reporting institutions, based on the latest Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity, in 2010. ⁷ Gross market values after taking into account legally enforceable bilateral netting agreements. Excludes CDS contracts for all countries except the United States. ⁸ Excludes commodity contracts.

Table 2

Global OTC foreign exchange derivatives market^{1, 2}

Amounts outstanding, in billions of US dollars

	Notional amounts outstanding				Gross market values			
	H1 2009	H2 2009	H1 2010	H2 2010	H1 2009	H2 2009	H1 2010	H2 2010
Total contracts	48,732	49,181	53,125	57,798	2,470	2,070	2,524	2,482
With reporting dealers	18,849	18,896	19,920	21,955	892	732	898	899
With other financial institutions	21,441	21,445	23,475	25,626	1,066	888	1,084	1,049
With non-financial customers	8,442	8,840	9,731	10,216	512	449	541	535
Up to 1 year ³	30,264	30,614	33,633	37,987	...	...	...	...
Between 1 and 5 years ³	9,694	9,712	10,737	10,137	...	...	...	...
Over 5 years ³	8,775	8,855	8,755	9,674	...	...	...	...
US dollar	40,735	40,921	45,338	48,739	1,961	1,662	2,025	1,945
Euro	20,653	20,364	19,993	21,930	1,032	864	1,121	888
Yen	11,436	11,238	11,843	12,576	531	539	657	688
Sterling	6,213	5,929	6,592	6,587	435	282	287	254
Swiss franc	3,072	3,106	3,825	4,196	103	98	197	305
Canadian dollar	1,735	1,858	2,228	2,421	95	78	100	101
Swedish krona	1,255	1,309	1,370	1,588	54	39	43	50
Other	12,366	13,637	15,059	17,558	729	578	617	735
<i>Memo: Exchange-traded contracts⁴</i>	225	292	347	314	...	...	...	...

¹ See footnote 1 to Table 1. ² Counting both currency sides of every foreign exchange transaction means that the currency breakdown sums to 200% of the aggregate. ³ Residual maturity. ⁴ See footnote 2 to Table 1.

Table 3

Global OTC interest rate derivatives market¹

Amounts outstanding, in billions of US dollars

	Notional amounts outstanding				Gross market values			
	H1 2009	H2 2009	H1 2010	H2 2010	H1 2009	H2 2009	H1 2010	H2 2010
Total contracts	437,228	449,875	451,831	465,260	15,478	14,020	17,533	14,608
With reporting dealers	148,152	138,580	132,128	134,483	4,759	3,970	4,548	4,114
With other financial institutions	250,097	275,688	282,027	293,478	9,928	9,313	12,068	9,646
With non-financial customers	38,979	35,607	37,677	37,299	790	736	917	848
Up to 1 year ²	159,145	180,007	196,040	190,487	...	...	...	...
Between 1 and 5 years ²	128,319	134,312	129,488	138,206	...	...	...	...
Over 5 years ²	149,765	135,556	126,303	136,567	...	...	...	...
US dollar	154,174	153,373	164,119	151,583	6,473	5,347	7,573	6,177
Euro	160,668	175,790	161,515	177,831	6,255	6,073	7,043	5,827
Yen	57,452	53,855	55,395	59,509	800	843	980	1,022
Sterling	32,591	34,257	36,219	37,813	1,117	1,038	1,146	878
Swiss franc	4,713	4,807	4,650	5,115	121	128	138	140
Canadian dollar	3,227	3,427	4,411	4,247	141	102	102	90
Swedish krona	5,294	4,696	4,461	5,098	118	99	98	71
Other	19,108	19,669	21,061	24,064	453	389	451	404
<i>Memo: Exchange-traded contracts³</i>	<i>57,733</i>	<i>67,056</i>	<i>69,551</i>	<i>61,943</i>	...	...	...	...

¹ See footnote 1 to Table 1. ² Residual maturity. ³ See footnote 2 to Table 1.

Table 4

Credit default swap market¹

Amounts outstanding, in billions of US dollars

	Notional amounts outstanding									Gross market values		
	H2 2009			H1 2010			H2 2010			H2 2009	H1 2010	H2 2010
	Bought	Sold	Total	Bought	Sold	Total	Bought	Sold	Total			
Total contracts	25,512	24,898	32,693	23,252	22,783	30,261	22,768	22,228	29,898	1,801	1,666	1,351
With reporting dealers	17,702	17,732	17,717	15,776	15,773	15,774	14,991	15,207	15,099	912	870	703
With other financial institutions	6,987	6,413	13,400	7,022	6,621	13,643	7,571	6,917	14,489	792	740	628
Banks and securities firms	5,115	4,834	9,950	4,043	3,932	7,975	3,826	3,520	7,346	496	405	325
Central counterparties	...	...	...	1,488	1,478	2,967	2,194	2,204	4,398	...	64	78
Insurance firms	235	96	331	205	68	273	190	79	270	45	33	29
SPVs, SPCs and SPEs ²	91	68	159	321	201	522	270	90	360	29	87	64
Hedge funds ²	64	38	101	261	400	661	250	404	654	7	45	36
Other financial customers	1,483	1,376	2,859	704	541	1,245	841	621	1,462	216	107	96
With non-financial customers	823	753	1,575	454	390	844	206	104	310	97	56	20
Up to 1 year	2,755	2,683	3,432	2,604	2,591	3,328	2,555	2,547	3,182	...	...	...
Between 1 and 5 years	16,558	16,340	21,308	15,877	15,728	20,786	16,130	15,797	21,481	...	...	...
Over 5 years	6,199	5,874	7,952	4,771	4,465	6,147	4,082	3,884	5,235	...	...	...
Single-name credit default swaps ³	17,599	17,219	21,917	14,545	14,422	18,494	14,188	13,854	18,145	1,243	993	884
Multi-name credit default swaps	7,913	7,679	10,776	8,707	8,361	11,767	8,580	8,374	11,753	559	673	467
Index products	...	...	...	5,771	5,461	7,500	5,470	5,387	7,476	...	...	...

¹ Data on total CDS and gross market values are shown on a net basis. Data on CDS bought and sold are shown on a gross basis, ie not adjusted for inter-dealer double-counting. ² Up to H2 2009, based on the data reported by four countries. From H1 2010, based on the data reported by nine countries. ³ See Table 5.

Table 5

Credit default swap market¹
Single-name instruments

Amounts outstanding, in billions of US dollars

	Notional amounts outstanding									Gross market values		
	H2 2009			H1 2010			H2 2010			H2 2009	H1 2010	H2 2010
	Bought	Sold	Total	Bought	Sold	Total	Bought	Sold	Total			
Total contracts	17,599	17,219	21,917	14,545	14,422	18,494	14,188	13,854	18,145	1,243	993	884
With reporting dealers	12,936	12,864	12,900	10,476	10,471	10,473	9,821	9,974	9,898	676	549	476
With other financial institutions	4,245	3,962	8,207	3,863	3,775	7,638	4,264	3,819	8,083	516	419	398
Banks and securities firms	3,277	3,032	6,309	2,670	2,528	5,197	2,799	2,355	5,154	328	261	234
Central counterparties	...	...	...	538	521	1,059	779	773	1,552	...	26	29
Insurance firms	144	74	218	82	49	131	102	58	160	39	19	25
SPVs, SPCs and SPEs ²	27	61	88	84	92	176	80	53	133	6	33	30
Hedge funds ²	50	21	71	162	263	425	145	229	374	4	27	22
Other financial customers	747	774	1,521	327	323	650	360	349	709	139	54	57
With non-financial customers	418	392	810	207	176	383	102	62	164	51	24	10
Up to 1 year	1,999	1,909	2,421	1,830	1,813	2,320	1,802	1,800	2,252	...	...	...
Between 1 and 5 years	11,594	11,416	14,465	9,964	9,927	12,627	9,926	9,680	12,716	...	...	...
Over 5 years	4,005	3,894	5,031	2,750	2,682	3,547	2,461	2,375	3,176	...	...	...
Sovereigns	1,496	1,497	1,943	1,869	1,844	2,392	2,013	2,028	2,542	...	...	...
Non-sovereigns	16,103	15,721	19,974	12,676	12,579	16,101	12,175	11,827	15,602	...	...	...
Investment grade (AAA—BBB)	12,018	11,767	14,949	10,152	10,056	13,024	9,632	9,494	12,631	...	...	...
BB and below	3,500	3,510	4,521	3,272	3,289	4,079	3,405	3,337	4,151	...	...	...
Non-rated	2,081	1,942	2,446	1,121	1,077	1,390	1,151	1,023	1,362	...	...	...

¹ Data on total CDS and gross market values are shown on a net basis. Data on CDS bought and sold are shown on a gross basis, ie not adjusted for inter-dealer double-counting. ² Up to H2 2009, based on the data reported by four countries. From H1 2010, based on the data reported by nine countries.

Table 6a
Herfindahl indices for all OTC interest rate derivatives contracts

	Canadian dollar			Swiss franc			Euro			Sterling			Japanese yen			Swedish krona			US dollar		
	FRAs ¹	IRS ²	Opts. ³	FRAs ¹	IRS ²	Opts. ³	FRAs ¹	IRS ²	Opts. ³	FRAs ¹	IRS ²	Opts. ³	FRAs ¹	IRS ²	Opts. ³	FRAs ¹	IRS ²	Opts. ³	FRAs ¹	IRS ²	Opts. ³
Jun 1998	824	681	999	1,053	504	953	...	...	...	713	419	723	779	440	500	1,160	539	975	521	393	869
Dec 1998	810	647	962	1,133	542	1,077	...	...	...	828	406	628	860	440	436	965	542	899	617	415	901
Jun 1999	923	737	1,438	1,085	678	937	834	572	525	856	433	828	942	484	949	870	549	824	655	495	847
Dec 1999	1,373	800	1,340	1,317	643	1,154	937	522	578	641	444	686	932	528	596	914	601	987	710	490	734
Jun 2000	1,418	856	1,458	1,421	655	1,432	851	511	530	614	429	677	1,014	545	715	936	586	1,036	755	500	782
Dec 2000	1,452	876	1,791	1,274	688	2,439	1,107	500	565	728	448	662	1,109	585	791	957	640	1,076	879	528	819
Jun 2001	1,347	874	1,621	1,264	678	1,239	936	486	559	693	438	648	1,937	613	708	1,125	592	989	888	529	764
Dec 2001	1,812	1,044	1,702	1,252	788	1,228	740	524	584	638	476	727	1,758	706	1,217	1,002	608	1,081	1,145	730	1,143
Jun 2002	1,556	1,044	1,682	1,234	824	1,461	556	478	561	605	489	648	1,763	779	1,202	944	532	1,149	907	666	1,044
Dec 2002	1,818	1,047	2,112	1,218	846	1,693	571	492	546	610	515	615	1,942	790	1,624	886	569	1,224	1,042	682	1,038
Jun 2003	1,530	1,041	2,161	1,264	896	1,684	539	481	608	607	544	643	1,972	806	1,223	839	561	1,174	901	701	961
Dec 2003	1,522	1,039	2,226	1,269	852	1,616	639	478	591	1,095	565	666	1,647	744	1,065	947	570	1,230	786	672	877
Jun 2004	1,965	1,048	2,313	1,169	797	1,796	670	473	675	930	594	747	1,308	728	978	965	583	1,137	725	626	847
Dec 2004	1,855	1,051	2,830	1,278	851	1,583	611	472	668	933	574	1,480	1,898	699	776	892	587	1,084	641	667	760
Jun 2005	1,659	1,000	2,955	1,158	936	1,508	631	479	567	855	614	1,288	2,565	664	781	811	564	1,077	652	650	756
Dec 2005	1,649	1,017	3,052	1,630	1,015	1,584	667	484	539	1,210	661	905	3,025	635	793	767	571	1,259	690	691	762
Jun 2006	1,670	1,018	2,703	1,698	1,080	1,398	690	503	534	1,083	707	958	3,280	613	824	847	586	1,431	788	678	816
Dec 2006	1,499	1,020	2,952	1,919	1,149	1,205	783	561	569	1,024	692	916	3,468	620	768	1,068	594	1,638	917	679	830
Jun 2007	1,164	987	2,978	2,043	1,150	1,045	812	623	604	1,120	736	806	2,569	675	799	1,096	628	1,945	850	686	865
Dec 2007	1,122	985	2,962	2,032	1,162	948	709	596	596	1,066	765	777	2,302	673	745	1,242	660	2,337	967	698	982
Jun 2008	1,405	976	3,314	1,712	1,336	899	648	562	594	1,055	830	824	1,981	660	938	1,152	677	1,904	881	729	1,020
Dec 2008	1,119	1,032	2,939	1,760	1,344	947	734	764	639	1,613	1,334	867	2,517	875	851	1,143	818	1,301	1,004	896	1,034
Jun 2009	1,240	1,245	2,544	1,672	1,351	852	581	657	607	1,194	921	950	2,164	777	865	1,055	751	1,540	996	949	936
Dec 2009	1,149	1,145	2,739	1,889	1,401	816	622	641	638	1,138	929	1,022	1,810	709	857	939	773	2,452	1,075	936	912
Jun 2010	1,323	1,038	2,097	1,925	1,465	926	621	620	624	1,038	979	1,256	1,409	639	873	924	809	2,623	975	916	866
Dec 2010	1,276	993	2,934	2,159	1,497	913	765	626	619	1,033	884	1,074	1,214	585	881	823	797	2,694	993	920	801

¹ Forward rate agreements. ² Interest rate swaps. ³ Interest rate options.

Table 6b
**Herfindahl indices for all OTC foreign
exchange derivatives contracts**

	Forwards, forex swaps and currency swaps	Options
Jun 1998	302	519
Dec 1998	333	504
Jun 1999	372	525
Dec 1999	413	544
Jun 2000	423	507
Dec 2000	423	528
Jun 2001	416	546
Dec 2001	471	564
Jun 2002	427	518
Dec 2002	434	503
Jun 2003	438	498
Dec 2003	429	605
Jun 2004	442	560
Dec 2004	448	611
Jun 2005	440	591
Dec 2005	464	624
Jun 2006	475	606
Dec 2006	481	567
Jun 2007	486	558
Dec 2007	497	570
Jun 2008	496	636
Dec 2008	515	641
Jun 2009	556	640
Dec 2009	570	628
Jun 2010	565	654
Dec 2010	570	635

Table 6c

Herfindahl indices for all OTC equity-linked derivatives contracts

	Europe		Japan		Latin America		Other Asia		United States	
	Forwards and swaps	Options	Forwards and swaps	Options	Forwards and swaps	Options	Forwards and swaps	Options	Forwards and swaps	Options
Jun 1998	909	627	2,655	1,074	5,484	3,545	1,232	1,447	1,086	1,362
Dec 1998	869	659	2,837	970	2,849	4,307	1,313	1,271	1,111	759
Jun 1999	715	639	2,170	1,462	3,071	6,169	3,506	1,388	1,215	1,042
Dec 1999	787	613	3,416	1,102	9,274	4,330	3,606	2,341	1,895	1,275
Jun 2000	618	657	2,501	1,018	6,881	6,776	5,119	1,586	1,088	749
Dec 2000	750	779	2,043	1,386	5,015	6,703	1,663	1,600	1,132	759
Jun 2001	693	891	1,461	860	5,163	4,353	1,631	1,188	1,048	663
Dec 2001	733	880	2,005	841	6,063	8,084	5,294	1,447	1,070	751
Jun 2002	770	952	1,822	1,072	7,546	7,585	6,086	1,550	1,174	890
Dec 2002	762	791	1,946	1,132	7,281	4,807	1,677	1,675	1,037	665
Jun 2003	768	985	1,854	2,322	8,839	9,332	3,197	1,894	964	793
Dec 2003	698	1,013	3,106	1,718	3,808	6,432	2,233	5,464	1,040	1,031
Jun 2004	611	1,195	1,984	2,553	3,732	6,304	2,010	5,435	855	836
Dec 2004	635	710	1,779	1,185	5,694	4,485	1,339	1,739	843	943
Jun 2005	597	661	2,064	898	6,953	4,427	1,355	1,177	722	725
Dec 2005	650	614	2,347	3,973	7,039	5,790	1,334	5,566	947	787
Jun 2006	613	690	1,408	3,409	6,704	3,918	1,294	5,537	946	1,385
Dec 2006	687	775	1,278	3,158	7,199	3,902	1,066	5,615	1,487	751
Jun 2007	782	716	1,168	2,333	7,876	3,735	1,343	1,098	1,057	802
Dec 2007	732	668	1,423	1,310	7,420	4,414	1,350	2,881	803	755
Jun 2008	707	706	1,044	989	5,979	6,290	1,180	1,249	847	741
Dec 2008	690	860	1,150	1,191	4,563	4,934	967	871	720	909
Jun 2009	921	981	981	1,512	4,687	6,181	949	1,105	773	1,145
Dec 2009	808	931	802	1,098	3,319	4,043	1,077	1,026	763	1,490
Jun 2010	850	1,122	693	1,010	3,900	6,468	1,219	1,135	877	1,410
Dec 2010	824	1,011	701	990	5,529	3,893	1,781	1,134	793	1,155

Table 6d

Herfindahl indices for OTC interest rate derivatives contracts between reporters¹

	Canadian dollar			Swiss franc			Euro			Sterling			Japanese yen			Swedish krona			US dollar		
	FRAs ²	IRS ³	Opts. ⁴	FRAs ²	IRS ³	Opts. ⁴	FRAs ²	IRS ³	Opts. ⁴	FRAs ²	IRS ³	Opts. ⁴	FRAs ²	IRS ³	Opts. ⁴	FRAs ²	IRS ³	Opts. ⁴	FRAs ²	IRS ³	Opts. ⁴
Jun 1998	972	740	1,193	1,231	551	1,110	...	...	...	673	414	866	832	494	489	1,021	610	816	653	454	722
Dec 1998	983	671	1,041	1,194	530	1,458	...	...	...	862	400	678	869	460	521	897	591	876	631	421	896
Jun 1999	1,008	772	1,436	1,176	776	1,044	744	595	591	982	408	1,145	894	501	546	819	563	786	692	537	873
Dec 1999	1,707	834	1,341	1,480	701	1,371	961	549	583	736	456	928	973	568	795	862	617	859	757	508	822
Jun 2000	1,594	876	1,212	1,505	724	1,495	956	543	584	666	427	886	1,073	600	822	964	607	969	932	533	858
Dec 2000	1,876	910	1,622	1,256	708	1,186	1,071	530	619	788	468	795	1,386	629	876	939	662	900	894	562	931
Jun 2001	1,365	818	1,558	1,211	705	1,350	954	506	618	769	458	826	2,319	691	803	1,279	601	857	934	577	832
Dec 2001	2,266	1,008	1,474	1,270	822	1,041	727	571	642	697	490	828	2,194	801	1,381	979	623	898	1,046	784	1,111
Jun 2002	1,992	949	1,720	1,262	854	1,220	540	503	636	647	497	786	2,095	866	1,665	962	530	1,143	1,070	719	1,239
Dec 2002	2,325	893	2,426	1,594	890	1,441	547	505	558	648	550	685	2,316	895	1,749	938	570	1,148	1,440	757	1,144
Jun 2003	2,000	974	2,695	1,606	835	1,487	555	474	600	576	522	670	2,379	935	1,423	970	569	1,101	1,142	757	991
Dec 2003	1,814	1,018	2,811	1,475	833	1,347	540	478	575	746	547	661	1,803	894	1,383	1,211	602	1,232	978	751	899
Jun 2004	2,118	1,008	2,722	1,348	800	1,691	506	474	605	1,012	723	721	1,463	843	1,158	1,125	651	1,111	791	678	820
Dec 2004	2,218	1,045	3,135	1,401	815	1,634	576	470	649	939	691	845	2,291	792	855	996	664	1,098	625	716	770
Jun 2005	1,815	938	2,333	1,244	932	1,223	661	483	556	977	695	842	3,163	749	871	902	641	1,036	604	682	783
Dec 2005	1,979	978	2,659	1,710	1,043	1,214	679	496	547	1,180	751	870	3,447	706	903	769	650	1,265	703	729	807
Jun 2006	1,698	996	2,686	1,813	1,169	1,296	707	515	557	1,090	756	908	3,841	661	881	771	658	1,830	782	695	979
Dec 2006	1,687	1,007	2,738	2,321	1,229	1,034	819	514	577	1,024	702	890	3,662	646	842	892	654	1,350	884	683	880
Jun 2007	1,246	952	2,342	2,086	1,217	901	701	512	616	936	729	801	2,354	705	972	918	676	1,504	825	672	889
Dec 2007	1,088	945	2,578	2,183	1,176	935	637	542	669	1,003	799	832	2,853	731	814	1,131	744	2,278	916	694	767
Jun 2008	1,315	978	2,641	1,868	1,470	844	642	566	665	1,177	944	813	2,279	748	1,063	1,193	785	1,721	952	764	925
Dec 2008	1,126	1,050	2,851	1,998	1,420	929	654	703	720	1,738	1,646	857	2,411	726	993	1,151	941	1,280	1,069	917	1,076
Jun 2009	1,256	1,109	3,202	2,026	1,483	1,097	608	590	670	1,396	1,131	929	2,359	678	947	1,142	974	1,193	1,041	811	998
Dec 2009	1,088	1,076	2,508	2,199	1,518	1,022	630	523	690	1,149	1,040	1,045	1,810	594	946	1,070	1,074	1,316	1,098	775	993
Jun 2010	1,488	1,051	2,451	2,189	1,681	1,045	660	524	699	1,310	859	1,184	1,417	559	1,056	1,075	1,200	1,545	1,043	723	987
Dec 2010	1,257	1,017	2,229	2,522	1,628	964	591	529	652	956	857	999	1,056	538	1,053	862	1,140	1,982	1,153	803	837

¹ Reporters (reporting dealers) are defined as those institutions whose head office is located in one of the eleven reporting countries and which participate in the semiannual OTC derivatives market statistics; in addition, reporting dealers include all branches and subsidiaries of these entities worldwide; reporting dealers will mainly be commercial and investment banks and securities houses, including their branches and subsidiaries and other entities which are active dealers. ² Forward rate agreements. ³ Interest rate swaps. ⁴ Interest rate options.

Table 6e
**Herfindahl indices for OTC foreign exchange
derivatives contracts between reporters¹**

Period	Forwards, forex swaps and currency swaps	Options
Jun 1998	323	527
Dec 1998	342	517
Jun 1999	385	539
Dec 1999	425	543
Jun 2000	437	550
Dec 2000	430	558
Jun 2001	411	496
Dec 2001	464	614
Jun 2002	444	526
Dec 2002	452	512
Jun 2003	478	538
Dec 2003	463	518
Jun 2004	499	683
Dec 2004	491	700
Jun 2005	493	635
Dec 2005	534	705
Jun 2006	532	656
Dec 2006	523	603
Jun 2007	516	588
Dec 2007	544	634
Jun 2008	557	761
Dec 2008	575	711
Jun 2009	647	767
Dec 2009	650	740
Jun 2010	603	678
Dec 2010	606	689

¹ Reporters (reporting dealers) are defined as those institutions whose head office is located in one of the eleven reporting countries and which participate in the semiannual OTC derivatives market statistics; in addition, reporting dealers include all branches and subsidiaries of these entities worldwide; reporting dealers will mainly be commercial and investment banks and securities houses, including their branches and subsidiaries and other entities which are active dealers.

Table 6f

Herfindahl indices for OTC equity-linked derivatives contracts between reporters¹

	Europe		Japan		Latin America		Other Asia		United States	
	Forwards and swaps	Options	Forwards and swaps	Options	Forwards and swaps	Options	Forwards and swaps	Options	Forwards and swaps	Options
Jun 1998	1,539	796	4,147	1,042	8,578	2,815	2,964	2,477	1,648	906
Dec 1998	1,192	582	4,424	1,081	4,350	2,127	2,370	2,001	1,154	1,347
Jun 1999	851	725	4,756	1,403	6,230	3,206	6,146	2,386	1,157	1,448
Dec 1999	883	750	2,539	1,316	8,613	6,936	6,097	5,268	1,049	1,796
Jun 2000	694	943	3,614	1,288	4,116	7,398	7,915	2,502	850	975
Dec 2000	938	874	5,209	1,758	5,115	3,433	3,550	1,604	1,136	1,020
Jun 2001	948	834	2,844	908	10,000	3,613	4,962	2,152	2,424	753
Dec 2001	859	912	2,541	924	10,000	4,273	9,879	2,120	1,315	783
Jun 2002	840	737	3,220	1,137	6,242	4,772	9,740	3,290	2,542	765
Dec 2002	753	728	2,435	968	4,863	8,724	5,494	3,678	1,632	951
Jun 2003	639	655	2,225	2,433	5,556	3,090	7,022	3,520	708	1,555
Dec 2003	705	676	2,789	1,698	6,932	7,515	5,918	3,166	889	668
Jun 2004	582	697	1,275	1,127	3,851	5,133	3,675	2,526	800	774
Dec 2004	669	714	2,395	1,116	3,284	4,587	2,467	874	931	762
Jun 2005	618	748	2,068	838	3,387	5,707	2,482	1,000	870	803
Dec 2005	757	779	1,836	5,063	5,729	9,957	2,062	995	787	851
Jun 2006	568	829	1,600	3,606	7,743	1,784	1,924	873	629	1,316
Dec 2006	705	873	1,699	2,216	5,273	3,253	1,189	931	1,118	915
Jun 2007	862	760	1,495	1,218	6,676	3,744	1,819	982	679	882
Dec 2007	1,068	751	1,904	1,147	7,056	2,948	2,114	991	879	765
Jun 2008	796	832	1,335	989	5,350	5,032	1,909	1,159	825	796
Dec 2008	838	1,104	1,414	897	9,565	4,112	1,678	1,270	1,053	941
Jun 2009	1,093	1,074	1,323	1,104	5,296	4,184	1,807	1,439	1,143	1,130
Dec 2009	935	987	973	940	9,590	6,205	1,506	1,228	1,170	1,162
Jun 2010	949	1,252	737	819	9,685	6,196	1,808	1,408	1,220	1,255
Dec 2010	922	1,141	701	846	6,486	8,835	2,283	1,398	1,041	1,368

¹ Reporters (reporting dealers) are defined as those institutions whose head office is located in one of the eleven reporting countries and which participate in the semiannual OTC derivatives market statistics; in addition, reporting dealers include all branches and subsidiaries of these entities worldwide; reporting dealers will mainly be commercial and investment banks and securities houses, including their branches and subsidiaries and other entities which are active dealers.

Table 6g

Herfindahl indices for OTC interest rate derivatives contracts between reporters¹ and non-reporters

	Canadian dollar			Swiss franc			Euro			Sterling			Japanese yen			Swedish krona			US dollar		
	FRAs ²	IRS ³	Opts. ⁴	FRAs ²	IRS ³	Opts. ⁴	FRAs ²	IRS ³	Opts. ⁴	FRAs ²	IRS ³	Opts. ⁴	FRAs ²	IRS ³	Opts. ⁴	FRAs ²	IRS ³	Opts. ⁴	FRAs ²	IRS ³	Opts. ⁴
Jun 1998	828	826	1,072	862	820	909	...	...	...	859	561	739	1,033	518	660	1,703	717	1,570	666	512	1,483
Dec 1998	885	786	1,047	1,959	711	731	...	...	...	1,234	521	663	1,709	501	466	1,371	649	1,121	750	501	987
Jun 1999	1,026	885	1,500	1,055	696	936	1,415	645	567	1,372	599	704	3,035	578	2,701	1,272	710	1,100	939	526	980
Dec 1999	1,613	982	1,589	1,063	763	928	999	597	973	754	503	634	3,055	592	688	1,535	799	1,398	883	558	756
Jun 2000	1,567	1,050	1,963	1,961	741	1,361	1,294	557	615	735	541	689	3,153	571	729	1,340	760	1,260	805	545	815
Dec 2000	1,412	1,050	2,065	1,638	725	4,531	1,449	513	541	884	503	717	2,502	632	759	1,341	784	1,444	1,338	574	814
Jun 2001	2,114	1,167	1,917	1,639	703	1,147	1,032	515	543	683	489	704	3,915	575	656	2,073	716	1,209	1,395	538	792
Dec 2001	2,003	1,495	2,111	2,171	951	2,146	1,040	540	578	797	562	766	4,132	625	1,009	1,771	771	1,379	1,978	731	1,275
Jun 2002	1,681	1,568	1,996	2,250	1,082	2,061	831	529	499	773	599	772	4,983	717	946	1,849	751	1,221	1,089	694	1,058
Dec 2002	1,991	1,631	2,451	2,079	1,099	2,254	931	559	607	879	604	719	3,782	739	1,402	1,690	717	1,339	1,319	683	1,018
Jun 2003	1,681	1,374	2,174	1,933	1,261	2,354	814	563	707	1,247	669	797	2,431	767	911	916	707	1,330	1,265	725	1,030
Dec 2003	2,079	1,366	2,269	1,990	1,035	2,140	1,209	551	684	2,928	685	781	2,105	762	802	879	638	1,327	859	674	915
Jun 2004	2,092	1,423	2,448	2,049	1,026	1,929	1,295	565	861	881	546	946	1,692	807	1,008	980	662	1,322	813	661	937
Dec 2004	1,635	1,305	2,817	1,376	1,075	1,682	847	541	835	1,210	549	2,755	1,304	757	1,087	917	840	1,159	871	683	793
Jun 2005	1,978	1,235	3,559	1,490	1,074	1,943	859	545	716	1,158	602	2,907	1,503	775	670	1,097	572	1,187	923	702	770
Dec 2005	1,448	1,220	3,339	1,907	1,125	2,054	891	556	632	1,693	687	1,127	1,409	775	732	1,174	611	1,531	928	747	751
Jun 2006	2,003	1,177	2,763	1,744	1,086	1,847	959	570	583	1,741	757	1,285	1,581	736	901	1,459	660	2,240	1,001	757	718
Dec 2006	1,656	1,158	3,167	3,516	1,185	1,644	1,032	685	698	1,449	773	1,144	2,406	734	901	2,006	708	2,065	1,404	765	863
Jun 2007	1,144	1,159	3,563	2,011	1,208	1,598	1,467	851	697	2,149	823	951	4,351	785	1,103	1,737	829	2,426	1,132	794	940
Dec 2007	1,811	1,158	3,137	1,737	1,248	1,498	1,759	779	798	2,995	904	1,409	1,893	822	1,716	1,852	857	2,531	1,289	844	1,745
Jun 2008	1,783	1,097	3,661	1,329	1,282	1,709	1,849	683	888	2,896	965	1,731	1,837	820	3,196	1,801	946	2,344	1,232	891	1,944
Dec 2008	1,554	1,707	3,428	1,605	1,355	1,487	1,110	703	868	3,056	983	1,862	3,690	999	1,964	1,593	841	1,584	1,566	940	2,253
Jun 2009	1,590	1,601	3,013	2,138	1,274	1,393	1,502	799	988	2,611	952	1,858	2,786	1,084	1,507	1,812	1,009	1,960	1,300	1,208	2,092
Dec 2009	2,333	1,343	3,572	1,413	1,342	1,210	1,521	781	1,086	3,239	944	1,919	2,913	1,037	1,351	2,300	878	3,486	1,750	1,130	1,983
Jun 2010	1,791	1,188	3,611	2,059	1,397	1,108	1,049	748	938	1,975	1,148	1,744	3,051	937	1,039	1,707	875	3,453	1,334	1,112	1,551
Dec 2010	2,597	1,014	3,653	2,082	1,473	1,296	1,874	720	1,009	3,433	952	2,153	3,737	835	1,426	1,814	726	3,781	1,321	1,015	1,408

¹ Reporters (reporting dealers) are defined as those institutions whose head office is located in one of the eleven reporting countries and which participate in the semiannual OTC derivatives market statistics; in addition, reporting dealers include all branches and subsidiaries of these entities worldwide; reporting dealers will mainly be commercial and investment banks and securities houses, including their branches and subsidiaries and other entities which are active dealers. ² Forward rate agreements. ³ Interest rate swaps. ⁴ Interest rate options.

Table 6h
**Herfindahl indices for OTC foreign exchange
derivatives contracts between reporters¹ and non-
reporters**

Period	Forwards, forex swaps and currency swaps	Options
Jun 1998	330	691
Dec 1998	357	640
Jun 1999	401	596
Dec 1999	432	646
Jun 2000	438	566
Dec 2000	444	576
Jun 2001	453	646
Dec 2001	516	675
Jun 2002	469	638
Dec 2002	468	603
Jun 2003	460	592
Dec 2003	443	995
Jun 2004	445	670
Dec 2004	476	656
Jun 2005	454	672
Dec 2005	461	645
Jun 2006	475	659
Dec 2006	484	635
Jun 2007	492	632
Dec 2007	533	673
Jun 2008	531	744
Dec 2008	563	691
Jun 2009	630	769
Dec 2009	627	811
Jun 2010	689	942
Dec 2010	643	897

¹ Reporters (reporting dealers) are defined as those institutions whose head office is located in one of the eleven reporting countries and which participate in the semiannual OTC derivatives market statistics; in addition, reporting dealers include all branches and subsidiaries of these entities worldwide; reporting dealers will mainly be commercial and investment banks and securities houses, including their branches and subsidiaries and other entities which are active dealers.

Table 6i

Herfindahl indices for OTC equity derivatives contracts between reporters¹ and non-reporters

	Europe		Japan		Latin America		Other Asia		United States	
	Forwards and swaps	Options	Forwards and swaps	Options	Forwards and swaps	Options	Forwards and swaps	Options	Forwards and swaps	Options
Jun 1998	1,158	995	2,508	1,236	5,291	3,715	1,468	812	1,227	1,700
Dec 1998	1,187	1,254	2,691	912	2,883	4,570	1,487	1,357	1,260	941
Jun 1999	802	892	1,877	2,028	3,093	7,075	3,134	1,680	1,304	1,450
Dec 1999	900	945	4,186	1,909	9,277	4,538	2,677	1,527	2,277	1,774
Jun 2000	706	743	2,616	1,822	6,919	7,794	3,734	1,346	1,290	884
Dec 2000	841	1,312	2,359	918	5,051	6,875	1,645	1,702	1,228	1,023
Jun 2001	733	1,962	1,924	1,412	5,524	4,945	1,848	1,146	1,321	851
Dec 2001	831	1,541	2,494	1,108	6,324	8,829	1,676	1,352	1,288	955
Jun 2002	824	2,235	2,059	1,096	7,932	8,324	2,256	1,059	1,390	1,212
Dec 2002	947	1,327	2,458	2,110	7,526	9,561	2,088	2,443	1,229	812
Jun 2003	984	1,788	2,910	2,132	8,863	9,622	1,273	2,454	1,265	809
Dec 2003	857	1,863	5,520	1,988	4,353	7,604	1,485	6,074	1,419	1,457
Jun 2004	879	2,227	3,114	4,446	3,839	6,678	1,536	6,013	1,276	1,063
Dec 2004	767	852	2,165	1,810	6,352	4,534	1,282	2,275	1,242	1,282
Jun 2005	837	794	2,330	1,583	7,270	4,623	1,313	1,616	929	852
Dec 2005	767	814	3,014	2,080	7,122	5,481	1,431	6,399	1,187	962
Jun 2006	803	721	1,942	3,099	6,857	3,971	1,240	7,619	1,234	1,612
Dec 2006	748	1,140	1,645	4,896	7,330	3,953	1,189	7,309	1,709	896
Jun 2007	822	1,073	1,582	4,599	8,167	3,842	1,549	1,513	1,415	924
Dec 2007	603	965	1,316	2,197	7,603	4,486	1,483	5,165	1,028	861
Jun 2008	949	918	1,217	1,786	6,809	6,527	1,207	1,841	1,014	836
Dec 2008	729	1,066	1,038	2,688	4,747	5,063	1,091	1,262	825	1,053
Jun 2009	872	1,325	1,304	2,984	5,335	6,404	962	1,254	848	1,571
Dec 2009	805	1,447	1,051	2,115	3,754	4,178	1,209	1,233	862	2,361
Jun 2010	910	1,333	993	2,515	5,009	6,478	1,329	1,224	1,142	2,019
Dec 2010	872	990	936	2,233	6,254	2,807	2,209	1,074	897	1,349

¹ Reporters (reporting dealers) are defined as those institutions whose head office is located in one of the eleven reporting countries and which participate in the semiannual OTC derivatives market statistics; in addition, reporting dealers include all branches and subsidiaries of these entities worldwide; reporting dealers will mainly be commercial and investment banks and securities houses, including their branches and subsidiaries and other entities which are active dealers.