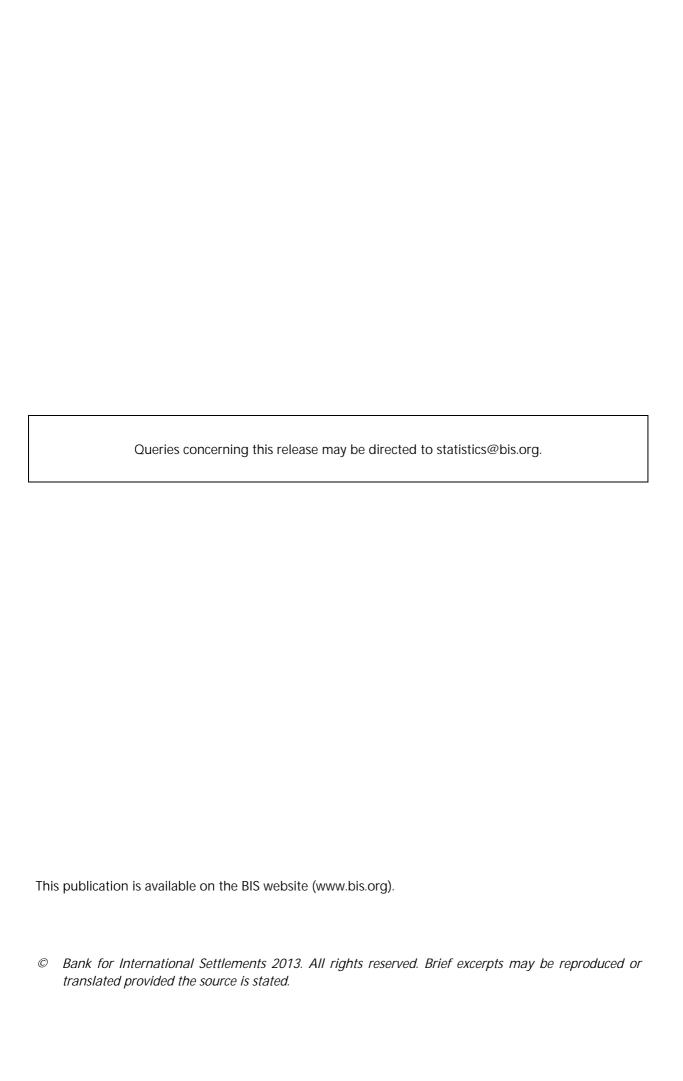


Statistical release: OTC derivatives statistics at end-December 2012

Monetary and Economic Department

May 2013



BIS over-the-counter derivatives statistics: data at end-December 2012

Section 1 below highlights developments in the latest statistics on over-the-counter (OTC) derivatives markets. Section 2 explains how the statistics are compiled. Tables 1 to 9 in Section 3 summarise the latest data, while the BIS website provides detailed breakdowns and time series data (http://www.bis.org/statistics/derdetailed.htm).

Data at end-June 2013 will be released no later than 15 November 2013.

1. OTC market developments in the second half of 2012¹

OTC derivatives notional amounts outstanding totalled \$633 trillion at end-December 2012, down from \$639 trillion at end-June 2012 (Graph 1, left-hand panel, and Table 1). Exchange rate movements masked a somewhat larger underlying decline because the depreciation of the US dollar against the euro and Swiss franc between end-June and end-December 2012 increased the dollar value of contracts denominated in those currencies. Over the same period, the appreciation of the US dollar against the yen tended to lower the dollar value of yen-denominated contracts.

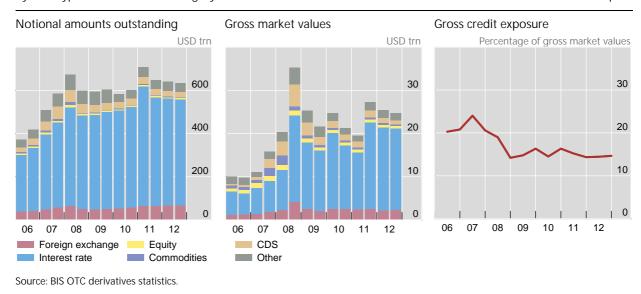
The gross market value of all contracts, ie the cost of replacing the contracts at current market prices, equalled \$24.7 trillion at end-2012 (Graph 1, middle panel). Gross credit exposure, which deducts from the gross market values the amounts that reflect legally enforceable bilateral netting agreements, equalled \$3.6 trillion. This was equivalent to 14.7% of market values, about the same percentage as at end-June 2012 (Graph 1, right-hand panel).

Global OTC derivatives

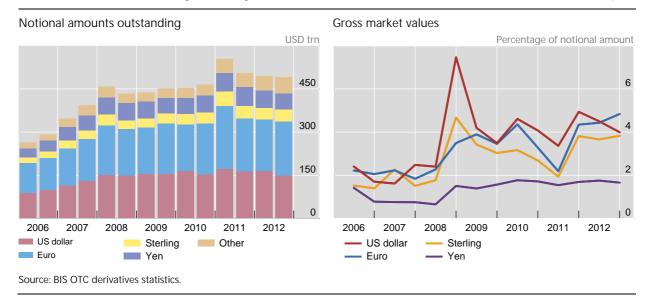
By data type and market risk category

Graph 1

1



For a detailed analysis of recent trends in OTC derivatives markets, see "Highlights of the BIS international statistics" in the forthcoming *BIS Quarterly Review*, to be published on 3 June 2013.



Interest rate derivatives

Notional amounts for interest rate derivatives, the largest segment of the market, stood at \$490 trillion at end-2012 (Table 1 and Graph 2, left-hand panel). While the overall figure was more or less unchanged from end-June 2012, breakdowns showed offsetting movements (Table 1). For swaps, notional amounts dropped in the second half of 2012 by about 2% to \$370 trillion, owing in part to the compression of trades through central counterparties (CCPs).² This was offset by an increase in forward rate agreements (FRAs) to \$71 trillion.³ Contracts between reporting dealers fell 16% to \$117 trillion, while those with other financial institutions increased to \$338 trillion (Table 3). Maturities shifted to the intermediate part of the spectrum, with contracts maturing in one to five years rising to 36.8% of notional amounts at end-2012 from 34.4% at end-June 2012.

Gross market values as a share of notional amounts outstanding were almost unchanged in aggregate at 3.8%. In the US dollar segment, the value of outstanding interest rate contracts dropped from 4.5% to 4.0% of amounts outstanding (Graph 2, right-hand panel). This contrasted with an increase from 4.4% to 4.8% in the market value of contracts on euro interest rates relative to notional amounts outstanding.

Foreign exchange derivatives

Notional amounts of FX derivatives rose slightly in the second half of 2012 (+1%), to \$67 trillion at end-December 2012. This reflected increases in medium-term maturities (+7%) and deals with other financial institutions (+5%). Contracts with the reporting dealer sector declined. The currency composition of contracts remained broadly stable, with the US dollar on one side of 85.5% of all contracts, followed by the euro at 35.3%.

Compression is a process that enables early termination of economically redundant derivative trades without changing the net position of each participant.

FRAs increased partly because more contracts were cleared with CCPs, which doubles the number of contracts (see footnote 5).

Currency shares add up to 200%, since each contract references two currencies.

Gross market values of FX derivatives remained almost unchanged as a share of notional amounts outstanding, at 3.4% at end-2012. For euro contracts, the ratio decreased from 3.6% to 3.2%, but this move was largely offset by a jump in the ratio of yen contract market values to notional amounts outstanding, from 3.7% to 5.9%. The increase in the gross market value of FX contracts referencing the yen was driven by renewed volatility in the yen exchange rate.

The market value of contracts referencing the Swiss franc continued to decline, to \$154 billion outstanding at end-December 2012. This brought to \$167 billion the cumulative decline in notional amounts outstanding from the \$321 billion peak reported in June 2011, prior to the announcement by the Swiss National Bank of a ceiling on the EURCHF exchange rate. Contracts referencing the Swiss franc were broadly stable in terms of the ratio of market value to amounts outstanding, at 4.0%.

Equity-linked and commodity derivatives

For equity-linked derivatives, notional amounts outstanding were almost unchanged at \$6.3 trillion at the end of 2012, after a 6% expansion in the first half of 2012 (Table 1). An increase in forwards and swaps almost offset the 5% decline in outstanding options. Market values of equity-linked contracts slipped another 6% in the second half of 2012, to \$605 billion; this was more than accounted for by the drop registered for options (–10%).

Amounts outstanding of commodity derivatives fell 14% from \$3 trillion to \$2.6 trillion, although market values contracted by substantially less (–8%), implying that the remaining contracts increased in average value (Table 1). Notional amounts outstanding on gold declined to \$486 billion. While gross market values on gold and other commodity contracts had both fallen by almost 20% in the first half of the year, in the second half the slide in the value of gold contracts was relatively bigger (–15%) than that in other commodity contracts (–7%).

Credit default swaps (CDS)

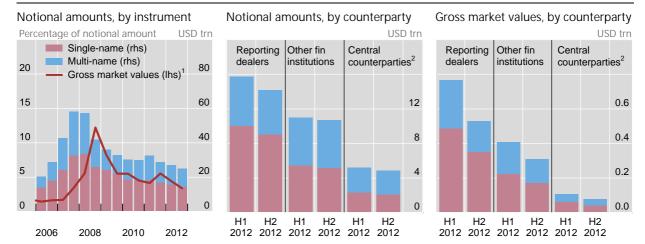
CDS notional amounts outstanding continued to decline during the second half of 2012, to \$25 trillion at end-2012 (Table 4 and Graph 3, left-hand panel). This brought the cumulative reduction since June 2011 to \$7 trillion, partly due to ongoing contract compression. During the half-year to end-2012, the reduction was concentrated among reporting dealers (–10%) and in maturities over five years (–37%). Contracts with special purpose vehicle (SPVs), however, moved in the opposite direction, growing 28% to \$0.6 trillion. The sectoral share of CDS counterparties was divided mainly between reporting dealers (56%) and other financial institutions (43%), while non-financial customers continued to be almost entirely absent (1%). The notional amounts outstanding referencing sovereigns declined by only 2% to \$2.9 trillion (Table 7).

The decline in gross market values was more pronounced than that in notional amounts outstanding. Market values fell to \$0.8 trillion at end-2012, equivalent to 3.4% of notional amounts (Table 4). This was down from 4.4% of notional amounts at end-June 2012 and 5.5% at end-2011 (Table 4). Although all segments declined, there was some differentiation by counterparty. The ratio of market value to outstanding amounts slid the most with SPV counterparties (from 10% to 4.6%) and the least with other financial customers (largely unchanged at 4.7%).

The share of total CDS notional amounts that was centrally cleared remained about 20%.⁵ Non-rated CDS cleared with CCPs were down 28%, which more than negated the 27% increase in the previous half-year (Table 5). The compression of contracts contributed to these changes. In contrast,

This means that approximately 11% of all original trades were cleared centrally, since a single contract initially agreed between two CCP members is replaced by two separate contracts, between the CCP and each of the counterparties.

Credit default swaps Graph 3



¹ As a percentage of the notional amount outstanding. ² Included as part of "other financial institutions".

Source: BIS OTC derivatives statistics.

notional amounts of non-investment grade CDS cleared with CCPs increased 24%, offsetting the 20% decline in the half-year up to June 2012.

The geographical division of CDS counterparties on an ultimate risk basis indicates that activity concentrated on counterparties in the dealers' home country. Notional amounts of CDS vis-à-vis foreign counterparties dropped to \$19 trillion, whereas those vis-à-vis counterparties headquartered in the reporters' home country increased to \$6 trillion (Table 8). At end-2012, counterparties in the home country accounted for 24.4% of notional amounts outstanding, up from 19.4% a year earlier.

Concentration indices

Herfindahl indices calculated on the basis of responses from individual dealers provide a measure of size concentration for dealers in OTC derivatives markets. In the interest rate swap segment, which is the single largest segment in OTC derivatives markets, concentration is highest for Swiss franc swaps and lowest for euro and yen swaps (Table 9a). Concentration in Canadian dollar interest rate options continued to rise and reached the highest level among all OTC interest rate derivatives contracts at end-2012, driven by developments in inter-dealer business. In contrast, concentration in yen FRAs declined from the high levels that had been building up since end-2010.

For FX derivatives, Herfindahl indices showed increased concentration for options in particular, which increased to a new high (Table 9b). Increased concentration was evident for contracts with other reporting dealers as well as non-reporting counterparties.

Statistical notes

Overview

Under the aegis of the Committee on the Global Financial System (CGFS), central banks collect data from leading global dealers in OTC derivatives markets. On the basis of aggregated data for dealers in individual countries, the BIS compiles and publishes global data. The aim is to obtain reasonably comprehensive and internationally consistent information on the size and structure of OTC derivatives markets.

Dealers in 13 countries currently contribute to the semiannual survey. The survey began in June 1998 with dealers in 11 countries: Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, the United Kingdom and the United States. From the end-December 2011 reporting period, dealers from Australia and Spain also began contributing to the survey.

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 11 reporting countries provided the BIS with data back to June 1998, including concentration measures for foreign exchange, interest rate and equity-linked derivatives (Tables 9a to 9i). Australia and Spain began contributing to the statistics on concentration measures from end-2011.

In response to a request from the CGFS, reporting central banks and the BIS began compiling and releasing semiannual statistics on credit default swaps (CDS) as of end-2004 (Tables 4 to 8). These include notional amounts outstanding and gross market values for single- and multi-name instruments. From end-June 2010, more granular information has been collected on CDS counterparties, ie central counterparties, special purpose vehicles and hedge funds, and index products as a subset of multi-name CDS instruments are shown separately. As of end-June 2011, additional data on net market values, an expanded sector breakdown for securitised products, additional rating information and a breakdown by counterparty location have been reported to the BIS.

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.

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.

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.

Gross credit exposures and liabilities: Gross 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.

Collateralisation is not taken into account for the computation of notional amounts outstanding, gross market values and gross credit exposure and liabilities.

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.

Instrument types

Forward contracts: Forward contracts represent agreements for the 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.

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 CDS contracts with constituent reference credits and a fixed coupon that are determined by an administrator such as Markit (which administers the CDX indices and the iTraxx indices). Index products include tranches of CDS indices.

Definitions for foreign exchange transactions

Outright forward: Transaction involving the exchange of two currencies at a rate agreed on the

> date of the contract for value or delivery (cash settlement) at some time in the future (more than two business days later). This category also includes forward foreign exchange agreement (FXA) transactions, non-deliverable

forwards and other forward contracts for differences.

Foreign exchange

swap:

Transaction involving the actual exchange of two currencies (principal amount only) on a specific date at a rate agreed at the time of the conclusion of the contract (the short leg), and a reverse exchange of the same two currencies at a date further in the future at a rate (generally different from the rate applied to the short leg) agreed at the time of the contract (the long leg). Both spot/forward and forward/forward swaps should be included. Short-term swaps carried out as "tomorrow/next day" transactions should also be

included in this category.

Contract which commits two counterparties to exchange streams of interest Currency swap:

> payments in different currencies for an agreed period of time and to exchange principal amounts in different currencies at a pre-agreed exchange

rate at maturity.

Currency option: Option contract that gives the right to buy or sell a currency with another

> currency at a specified exchange rate during a specified period. This category also includes exotic foreign exchange options such as average rate options

and barrier options.

Definitions for single-currency interest rate derivatives

Forward rate Interest rate forward contract in which the rate to be paid or received on a agreement (FRA):

specific obligation for a set period of time, beginning at some time in the

future, is determined at contract initiation.

Interest rate swap: Agreement to exchange periodic payments related to interest rates on a

> single currency; can be fixed for floating, or floating for floating based on different indices. This group includes those swaps whose notional principal is

amortised according to a fixed schedule independent of interest rates.

Interest rate option: Option contract that gives the right to pay or receive a specific interest rate

on a predetermined principal for a set period of time.

Definitions for equity and stock index derivatives

Equity forward: Contract to exchange an equity or equity basket at a set price at a future

date.

Equity swap: Contract in which one or both payments are linked to the performance of

equities or an equity index (eg S&P 500). It involves the exchange of one equity or equity index return for another and the exchange of an equity or

equity index return for a floating or fixed interest rate.

Equity option: Option contract that gives the right to deliver or receive a specific equity or

equity basket at an agreed price at an agreed time in the future.

Definitions for commodity derivatives

Commodity forward: Forward contract to exchange a commodity or commodity index at a set price

at a future date.

Commodity swap: Contract with one or both payments linked to the performance of a

commodity price or a commodity index. It involves the exchange of the return on one commodity or commodity index for another and the exchange of a

commodity or commodity index for a floating or fixed interest rate.

Commodity option: Option contract that gives the right to deliver or receive a specific commodity

or commodity index at an agreed price at a set date in the future.

Non-plain vanilla products are in principle separated into their plain vanilla components. If this is not feasible, then the OTC options section takes precedence in the instrument classification, so that any product with an embedded option is reported as an OTC option. All other OTC products are reported in the forwards and swaps section.

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 13 reporting countries (Australia, Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Spain, Sweden, Switzerland, the United Kingdom and the United States) 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 (CCPs), 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 and central banks).

In the specific case of 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.

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 collected in the survey:

- (1) Notional amounts outstanding: 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 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.
- CCPs: Entities that interpose themselves between counterparties to contracts traded in one
 or more financial markets, becoming the buyer to every seller and the seller to every buyer.⁶
- Insurance firms (including pension funds⁷), reinsurance and financial guaranty firms.
- Special purpose vehicles (SPVs), special purpose corporations (SPCs) and special purpose
 entities (SPEs): 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 assetbacked and mortgage-backed securities.
- 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 customers: Any counterparty other than those described above, in practice mainly corporate firms and governments.

The CCPs that currently serve or plan to serve the CDS market are: Eurex Credit Clear, ICE Clear Europe and LCH.Clearnet SA in Europe; CME CMDX and ICE Trust US in North America; and Japan Securities Clearing Corporation and Tokyo Financial Exchange in Japan.

As a general rule, pension funds are included under insurance firms. However, if they do not offer saving 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".

Central counterparties and the novation of contracts

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 derivatives contract between two reporting dealers is cleared by a CCP, this contract is replaced, in an operation called novation, by two new contracts: one between counterparty A and the CCP, and a second between the CCP and counterparty B. As the BIS data record 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.

Maturities

A breakdown by remaining contract maturity is provided for foreign exchange contracts (including gold), interest rate contracts, equity-linked contracts and CDS notional amounts outstanding, according to the following bands:

- one year or less
- over one year and up to five years
- over five years

In the case of transactions where the first leg has not come due, the remaining maturity of each leg should be determined as the difference between the reporting date and the settlement or due date, respectively, of the near- and far-end legs of the transaction.

For CDS, the remaining contract maturity is to be determined by the difference between the reporting date and the expiry date for the contract and not by the date of execution of the deal.

Ratings (for credit default swaps)

A breakdown by rating is available for CDS. The current rating for any contract is used and not the rating at inception. The categories used are those provided by the major rating companies. If no public ratings are available, reporters have been requested to use their internal ratings.

Data are available for the following rating categories:

- investment grade (AAA–BBB)
 - upper investment grade (AAA and AA)
 - lower investment grade (A and BBB)
- below investment grade (BB and below)
- non-rated

If a CDS contract refers to a specific underlying reference asset for which several public ratings are available, the lower of the two highest is used. However, if the CDS contract specifies merely a corporate name (or country) as the underlying credit rather than a specific reference obligation, reporters are allowed to report the internal credit rating that meets their business requirements.

For single-name instruments, the rating of the underlying reference obligation(s) is used.

For rated multi-name instruments, the rating of the contract (entire basket, portfolio or index) is used. If the portfolio or basket underlying a multi-name instrument is unrated or not available, then it is recommended that the contract be allocated to (1) "investment grade" if all underlying contracts are investment grade, and to (2) "below investment grade" if the underlying reference entities are sub-investment grade.

An instrument is classified as "non-rated" only if (1) it does not have any rating and (2) it is not possible or very burdensome to classify the contract based on the ratings of the underlying reference entities.

Sector of the reference entity (for credit default swaps)

A breakdown is provided for CDS by economic sector of the obligor of the underlying reference obligation (reference entity) as follows:

Sovereigns: Restricted to a country's central, state or local government, excluding publicly owned financial or non-financial firms.

Non-sovereign, of which:

- Financial firms: All categories of financial institution, including commercial and investment banks, securities houses, mutual funds, hedge funds and money market funds, building societies, leasing companies, insurance companies and pension funds.
- Non-financial firms: All categories of institution other than financial firms and sovereigns (as defined above).
- Securitised products, ie portfolio or structured products: CDS contracts written on a securitised product or a combination of securitised products, ie asset-backed securities (ABS) or mortgage-backed securities (MBS). The reference entity of these types of contract is not the securitised product itself, ie the ABS or the MBS, but the individual securities or loans that were used to construct it. From this perspective, these contracts are classified as multi-name rather than single-name instruments. Hence, by default, all CDS contracts written on securitised products are classified as multi-name instruments. They can be decomposed in the following two components.
 - CDS on asset-backed and mortgage-backed securities
 - CDS on other securitised products (including collateralised debt obligations)
- Multisectors: CDS on other than securitised products where the reference entities belong to different sectors (such as in the case of basket credit default swaps).

Location of the counterparty (for credit default swaps)

A breakdown by nationality of the counterparty (ie on an ultimate risk basis) is provided for CDS notional amounts outstanding.

Home country: Trades with counterparties with head office incorporated in reporter's home country (reporting dealers and non-reporting counterparties in home country).

Abroad: Trades with counterparties abroad (reporting dealers and non-reporting counterparties abroad).

3. Statistical tables

Table 1

Global OTC derivatives market¹

Amounts outstanding, in billions of US dollars

	No	tional amou	nts outstand	ing		Gross ma	rket value	
	H1 2011	H2 2011	H1 2012	H2 2012	H1 2011	H2 2011	H1 2012	H2 2012
GRAND TOTAL	706,884	647,777	639,366	632,579	19,518	27,278	25,392	24,740
A. Foreign exchange contracts	64,698	63,349	66,645	67,358	2,336	2,555	2,217	2,304
Outright forwards and forex swaps	31,113	30,526	31,395	31,718	777	919	771	803
Currency swaps	22,228	22,791	24,156	25,420	1,227	1,318	1,184	1,247
Options	11,358	10,032	11,094	10,220	332	318	262	254
Memo: Exchange-traded contracts ²	389	308	325	337				
B. Interest rate contracts ³	553,240	504,117	494,427	489,703	13,244	20,001	19,113	18,833
FRAs	55,747	50,596	64,711	71,353	59	67	51	47
Swaps	441,201	402,611	379,401	369,999	11,861	18,046	17,214	17,080
Options	56,291	50,911	50,314	48,351	1,324	1,888	1,848	1,706
Memo: Exchange-traded contracts ²	76,039	53,298	55,635	48,630				
C. Equity-linked contracts	6,841	5,982	6,313	6,251	708	679	645	605
Forwards and swaps	2,029	1,738	1,880	2,045	176	156	147	157
Options	4,813	4,244	4,434	4,207	532	523	497	448
Memo: Exchange-traded contracts ²	6,416	2,956	3,561	3,583				
D. Commodity contracts ⁴	3,197	3,091	2,994	2,587	471	481	390	358
Gold	468	521	523	486	50	75	62	53
Other	2,729	2,570	2,471	2,101	421	405	328	306
Forwards and swaps	1,846	1,745	1,659	1,363				
Options	883	824	812	739				
E. Credit default swaps ⁵	32,409	28,626	26,931	25,069	1,345	1,586	1,187	848
Single-name instruments	18,105	16,865	15,566	14,309	854	958	715	527
Multi-name instruments	14,305	11,761	11,364	10,760	490	628	472	321
Index products		10,514	9,731	9,663				
F. Unallocated ⁶	46,498	42,610	42,057	41,611	1,414	1,976	1,840	1,792
GROSS CREDIT EXPOSURE ⁷					2,971	3,912	3,668	3,626
Memo: Exchange-traded contracts 2, 8	82,844	56,563	59,522	52,550				

¹ Based on the data reported by 11 countries up to H1 2011. Includes data reported by Australia and Spain from H2 2011 onwards. Data on total notional amounts outstanding, gross market value and gross credit exposure are shown on a net basis, ie transactions between reporting dealers are counted only once. The definitions of notional amounts outstanding, gross market value and gross credit exposure are available under Section 2 of the statistical notes. 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 to 8. 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 Before 2011, 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

	Not	ional amoui	nts outstan	ding		Gross mar	ket values	
	H1 2011	H2 2011	H1 2012	H2 2012	H1 2011	H2 2011	H1 2012	H2 2012
Total contracts	64,698	63,349	66,645	67,358	2,336	2,555	2,217	2,304
With reporting dealers	26,170	27,953	29,484	28,834	875	1,041	876	942
With other financial institutions	28,854	25,916	27,538	28,831	973	989	884	909
With non-financial customers	9,675	9,480	9,623	9,693	489	525	457	453
Up to 1 year ³	47,732	45,344	48,465	48,135				
Between 1 and 5 years ³	11,904	12,755	12,842	13,728				
Over 5 years ³	5,061	5,250	5,338	5,495				
US dollar	54,035	54,061	57,354	57,600	1,808	2,084	1,800	1,868
Euro	24,972	23,235	24,290	23,797	894	1,016	878	759
Yen	13,068	13,661	13,640	14,111	540	590	506	827
Sterling	7,011	7,023	7,591	7,825	251	237	213	207
Swiss franc	4,876	4,081	4,055	3,832	321	224	170	154
Canadian dollar	3,065	2,862	3,002	3,099	121	97	89	80
Swedish krona	1,739	1,488	1,498	1,453	41	35	35	36
Other	20,629	20,286	21,860	22,999	696	827	744	676
Memo: Exchange-traded contracts ⁴	389	308	325	337				

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

	Noti	ional amoui	nts outstan	ding		Gross mar	ket values	
	H1 2011	H2 2011	H1 2012	H2 2012	H1 2011	H2 2011	H1 2012	H2 2012
Total contracts	553,240	504,117	494,427	489,703	13,244	20,001	19,113	18,833
With reporting dealers	159,222	157,348	139,146	116,896	3,977	6,453	6,568	6,024
With other financial institutions	355,442	310,518	316,905	338,076	8,616	12,450	11,483	11,669
With non-financial customers	38,577	36,252	38,376	34,731	650	1,098	1,062	1,141
Up to 1 year ²	246,637	199,363	207,236	190,672				
Between 1 and 5 years ²	177,182	176,420	170,252	180,260				
Over 5 years ²	129,420	128,334	116,938	118,771				
US dollar	170,623	161,864	164,024	148,676	5,745	7,993	7,386	5,936
Euro	219,094	184,702	179,076	187,363	4,795	8,023	7,941	9,067
Yen	65,491	66,819	60,092	54,812	1,012	1,132	1,055	911
Sterling	50,109	43,367	39,913	42,244	970	1,655	1,462	1,616
Swiss franc	6,170	5,395	5,494	5,357	144	193	161	149
Canadian dollar	6,905	6,397	7,380	7,507	113	205	195	166
Swedish krona	5,832	5,844	6,994	6,193	64	120	94	116
Other	29,017	29,729	31,452	37,551	402	682	819	872
Memo: Exchange-traded contracts 3	76,039	53,298	55,635	48,630				

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

Table 4

Credit default swaps¹

Amounts outstanding, in billions of US dollars

		Not	ional amoui		Gross marl	cet values	Net marke values		
		H1 2012			H2 2012			110 0040	110 0040
	Bought	Sold	Total	Bought	Sold	Total	H1 2012	H2 2012	H2 2012
Total contracts	21,619	21,059	26,931	19,844	19,373	25,069	1,187	848	201
With reporting dealers	15,712	15,783	15,747	14,100	14,197	14,149	767	529	83
With other financial institutions	5,783	5,214	10,997	5,612	5,108	10,720	407	309	110
Central counterparties ²	2,591	2,617	5,209	2,444	2,447	4,891	109	78	12
Banks and security firms	1,607	1,312	2,919	1,609	1,354	2,963	125	102	20
Insurance firms	206	71	278	191	68	258	16	12	8
SPVs, SPCs and SPEs	359	100	458	406	181	587	46	27	18
Hedge funds	383	625	1,008	373	584	957	53	39	17
Other financial customers	636	489	1,125	589	474	1,063	58	50	35
With non-financial customers	125	62	187	132	68	200	13	10	8
Single-name credit default swaps	12,871	12,707	15,566	11,711	11,629	14,309	715	527	
With reporting dealers	9,985	10,037	10,011	8,989	9,073	9,031	485	350	
With other financial institutions	2,806	2,635	5,441	2,647	2,523	5,170	224	171	
Central counterparties ²	1,177	1,175	2,352	1,031	1,047	2,078	61	41	
Banks and security firms	1,007	833	1,840	962	816	1,778	79	62	
Insurance firms	73	38	111	75	39	114	8	8	
SPVs, SPCs and SPEs	102	29	131	145	80	225	17	12	
Hedge funds	162	335	497	158	307	464	27	18	
Other financial customers	284	225	509	277	234	511	31	29	
With non-financial customers	80	34	114	74	33	108	6	5	
Multi-name credit default swaps	8,748	8,352	11,364	8,133	7,744	10,760	472	321	
With reporting dealers	5,727	5,745	5,736	5,111	5,124	5,118	281	179	
With other financial institutions	2,977	2,579	5,555	2,965	2,585	5,549	184	138	
Central counterparties ²	1,414	1,442	2,856	1,413	1,400	2,813	47	37	
Banks and security firms	601	478	1,079	647	538	1,185	45	40	
Insurance firms	133	33	166	116	28	144	8	5	
SPVs, SPCs and SPEs	256	71	327	261	101	362	29	15	
Hedge funds	220	290	511	215	278	493	26	21	
Other financial customers	352	264	616	312	240	552	28	21	
With non-financial customers	44	28	73	58	35	93	7	4	
of which: index products	7,500	7,395	9,731	7,254	7,151	9,663			
With reporting dealers	5,179	5,150	5,164	4,750	4,736	4,743			
With other financial institutions	2.301	2,225	4,526	2,478	2.392	4.870			
Central counterparties ²	1,317	1,330	2,647	1,413	1,398	2,811			
Banks and security firms	452	397	849	531	482	1,013			
Insurance firms	61	27	88	49	23	72			"
SPVs, SPCs and SPEs	62	47	109	93	81	174			
Hedge funds	198	273	471	205	269	474			
Other financial customers	212	151	363	186	138	325			
With non-financial customers	20	21	41	27	24	50			

See footnote 1 to Table 1 Data on notional amounts outstanding bought and sold are recorded on a gross basis, ie not adjusted for inter-dealer double-counting.

²Both contracts post-novation are captured.

Table 5

Credit default swaps, by rating category¹

Notional amounts outstanding, in billions of US dollars

		Total		In	vestment gra (AAA-BBB)	de		investment of BB and below	,	Non-rated ²			
	H2 2011	H1 2012	H2 2012	H2 2011	H1 2012	H2 2012	H2 2011	H1 2012	H2 2012	H2 2011	H1 2012	H2 2012	
Total contracts	28,626	26,931	25,069	17,533	16,714	15,102	5,958	5,151	5,147	5,136	5,066	4,819	
With reporting dealers	16,632	15,747	14,149	9,785	9,575	8,303	3,693	3,360	3,018	3,153	2,812	2,828	
With other financial institutions	11,798	10,997	10,720	7,660	7,042	6,693	2,219	1,759	2,098	1,919	2,195	1,929	
Central counterparties ³	5,456	5,209	4,891	3,968	3,720	3,464	856	686	848	632	802	578	
Banks and security firms	3,525	2,919	2,963	2,160	1,759	1,747	838	613	758	526	548	459	
Insurance firms	298	278	258	137	130	113	37	39	61	124	109	84	
SPVs, SPCs and SPEs	409	458	587	152	198	289	58	44	52	200	217	246	
Hedge funds	835	1,008	957	516	637	553	194	200	199	125	171	204	
Other financial customers	1,275	1,125	1,063	727	599	527	236	178	179	312	348	357	
With non-financial customers	197	187	200	88	96	106	46	31	32	64	59	63	
Single-name credit default swaps	16,865	15,566	14,309	11,405	10,693	9,712	3,825	3,224	2,830	1,635	1,649	1,76	
With reporting dealers	10,590	10,011	9,031	6,742	6,492	5,846	2,733	2,485	2,087	1,115	1,034	1,098	
With other financial institutions	6,141	5,441	5,170	4,605	4,138	3,806	1,058	726	732	478	577	632	
Central counterparties ³	2,491	2,352	2,078	2,142	2,080	1,728	295	178	155	54	95	195	
Banks and security firms	2,245	1,840	1,778	1,543	1,241	1,223	476	320	337	226	279	218	
Insurance firms	127	111	114	76	66	63	10	8	23	41	37	28	
SPVs, SPCs and SPEs	132	131	225	63	68	158	23	28	36	46	35	31	
Hedge funds	477	497	464	312	329	282	112	113	104	54	55	78	
Other financial customers	669	509	511	469	354	352	142	79	77	58	76	82	
With non-financial customers	134	114	108	59	63	59	34	13	11	42	38	37	
Multi-name credit default swaps	11,761	11,364	10,760	6,128	6,021	5,390	2,133	1,926	2,317	3,500	3,417	3,052	
With reporting dealers	6,042	5,736	5,118	3,044	3,084	2,457	960	875	931	2,038	1,778	1,730	
With other financial institutions	5,656	5,555	5,549	3,055	2,904	2,887	1,161	1,033	1,366	1,440	1,618	1,29	
Central counterparties ³	2,965	2,856	2,813	1,825	1,640	1,736	561	509	693	578	708	383	
Banks and security firms	1,279	1,079	1,185	617	518	523	362	293	421	301	269	241	
Insurance firms	171	166	144	61	64	50	27	31	38	83	72	56	
SPVs, SPCs and SPEs	278	327	362	89	130	131	35	15	16	154	182	215	
Hedge funds	358	511	493	205	308	271	82	87	95	71	116	126	
Other financial customers	605	616	552	258	245	176	94	99	102	253	272	275	
With non-financial customers	63	73	93	29	33	46	12	18	21	22	22	25	

¹ See footnote 1 to Table 1. ² Without rating or rating not known. ³ Both contracts post-novation are captured.

Table 6

Credit default swaps, by remaining maturity¹

Notional amounts outstanding, in billions of US dollars

		Total		C	ne year or le	ss	Over one	e year up to f	ive years	Over five years			
	H2 2011	H1 2012	H2 2012	H2 2011	H1 2012	H2 2012	H2 2011	H1 2012	H2 2012	H2 2011	H1 2012	H2 2012	
Total contracts	28,626	26,931	25,069	5,424	5,615	5,078	19,535	18,248	18,056	3,668	3,068	1,935	
With reporting dealers	16,632	15,747	14,149	3,255	3,562	3,173	11,344	10,546	9,962	2,032	1,639	1,013	
With other financial institutions	11,798	10,997	10,720	2,143	2,026	1,879	8,061	7,579	7,953	1,593	1,391	888	
Central counterparties ²	5,456	5,209	4,891	1,090	948	761	3,761	3,661	3,827	604	600	302	
Banks and security firms	3,525	2,919	2,963	715	649	692	2,422	2,025	2,061	388	244	210	
Insurance firms	298	278	258	36	38	33	175	161	171	87	78	54	
SPVs, SPCs and SPEs	409	458	587	36	48	88	236	293	429	137	117	70	
Hedge funds	835	1,008	957	106	174	155	579	657	686	150	177	116	
Other financial customers	1,275	1,125	1,063	161	169	150	887	781	778	227	175	136	
With non-financial customers	197	187	200	25	26	25	130	123	141	42	38	34	
Single-name credit default swaps	16,865	15,566	14,309	3,408	3,508	3,519	11,315	10,432	9,725	2,142	1,626	1,065	
With reporting dealers	10,590	10,011	9,031	2,245	2,384	2,312	7,073	6,669	6,106	1,271	958	613	
With other financial institutions	6,141	5,441	5,170	1,146	1,109	1,188	4,147	3,683	3,546	848	649	437	
Central counterparties ²	2,491	2,352	2,078	452	464	470	1,770	1,665	1,469	269	223	139	
Banks and security firms	2,245	1,840	1,778	513	468	487	1,464	1,207	1,177	268	165	114	
Insurance firms	127	111	114	11	16	18	72	62	73	43	33	23	
SPVs, SPCs and SPEs	132	131	225	14	11	43	65	75	149	52	46	33	
Hedge funds	477	497	464	54	65	81	337	339	327	87	93	56	
Other financial customers	669	509	511	102	85	88	439	335	351	129	89	71	
With non-financial customers	134	114	108	16	15	19	95	81	73	23	18	16	
Multi-name credit default swaps	11,761	11,364	10,760	2,016	2,106	1,559	8,220	7,816	8,330	1,525	1,442	870	
With reporting dealers	6,042	5,736	5,118	1,010	1,178	861	4,271	3,877	3,856	761	680	401	
With other financial institutions	5,656	5,555	5,549	997	917	692	3,914	3,896	4,407	746	742	451	
Central counterparties ²	2,965	2,856	2,813	638	484	291	1,991	1,996	2,358	335	376	163	
Banks and security firms	1,279	1,079	1,185	202	181	205	957	818	884	120	80	96	
Insurance firms	171	166	144	24	22	15	103	99	98	44	45	31	
SPVs, SPCs and SPEs	278	327	362	22	37	44	170	218	281	85	71	37	
Hedge funds	358	511	493	52	108	74	243	318	359	63	84	60	
Other financial customers	605	616	552	59	84	62	449	446	427	98	86	64	
With non-financial customers	63	73	93	9	11	6	35	43	68	19	19	18	

¹ See footnote 1 to Table 1. ² Both contracts post-novation are captured.

OTC derivatives statistics at end-December 2012

Table 7

Credit default swaps, by sector¹

Notional amounts outstanding, in billions of US dollars

	То	tal ²	Sove	reigns	Financi	al firms	Non-fina	ncial firms	Securitise	d products	Multiple	sectors
	H1 2012	H2 2012	H1 2012	H2 2012	H1 2012	H2 2012	H1 2012	H2 2012	H1 2012	H2 2012	H1 2012	H2 2012
Total contracts	26,931	25,069	2,986	2,941	6,793	6,420	10,184	9,299	955	903	6,005	5,505
With reporting dealers	15,747	14,149	2,123	2,114	3,893	3,491	6,115	5,421	662	455	2,952	2,668
With other financial institutions	10,997	10,720	841	807	2,855	2,888	4,008	3,819	282	437	3,010	2,768
Central counterparties ³	5,209	4,891	118	121	1,280	1,402	2,245	1,935	5	5	1,562	1,428
Banks and security firms	2,919	2,963	390	414	824	715	1,052	1,095	121	295	533	445
Insurance firms	278	258	14	14	62	68	67	59	41	45	94	73
SPVs, SPCs and SPEs	458	587	35	29	110	99	83	181	23	17	207	260
Hedge funds	1,008	957	155	119	295	308	318	305	39	32	201	194
Other financial customers	1,125	1,063	129	111	285	297	244	245	54	43	414	367
With non-financial customers	187	200	21	20	45	41	61	59	12	11	47	69
Single-name credit default swaps	15,566	14,309	2,848	2,799	4,162	3,853	8,556	7,657	0	0	0	0
With reporting dealers	10,011	9,031	2,026	2,011	2,816	2,502	5,169	4,518	0	0	0	0
With other financial institutions	5,441	5,170	802	768	1,303	1,312	3,336	3,090	0	0	0	0
Central counterparties ³	2,352	2,078	116	120	374	380	1,862	1,578	0	0	0	0
Banks and security firms	1,840	1,778	378	401	524	472	938	905	0	0	0	0
Insurance firms	111	114	14	14	46	54	50	46	0	0	0	0
SPVs, SPCs and SPEs	131	225	11	8	52	60	68	158	0	0	0	0
Hedge funds	497	464	154	117	108	126	235	221	0	0	0	0
Other financial customers	509	511	127	109	199	220	183	183	0	0	0	0
With non-financial customers	114	108	21	20	43	39	51	49	0	0	0	0
Multi-name credit default swaps	11,364	10,760	138	143	2,631	2,567	1,628	1,642	955	903	6,005	5,505
With reporting dealers	5,736	5,118	97	104	1,076	989	946	902	662	455	2,952	2,668
With other financial institutions	5,555	5,549	40	38	1,552	1,576	672	729	282	437	3,010	2,768
Central counterparties ³	2,856	2,813	1	1	907	1,022	382	356	5	5	1,562	1,428
Banks and security firms	1,079	1,185	11	13	300	243	114	189	121	295	533	445
Insurance firms	166	144	0	0	15	13	17	13	41	45	94	73
SPVs, SPCs and SPEs	327	362	24	21	58	40	15	23	23	17	207	260
Hedge funds	511	493	1	1	186	181	83	84	39	32	201	194
Other financial customers	616	552	2	2	85	78	61	62	54	43	414	367
With non-financial customers	73	93	1	1	2	1	11	10	12	11	47	69

¹ See footnote 1 to Table 1. ² Due to an incomplete breakdown reported by one country, the sum of components is less than the total. ³ Both contracts post-novation are captured.

Table 8

Credit default swaps, by location of counterparty¹

Notional amounts outstanding, in billions of US dollars

		Total		With	eporting d	ealers	With	non-repor	ters
	H2 2011	H1 2012	H2 2012	H2 2011	H1 2012	H2 2012	H2 2011	H1 2012	H2 2012
All locations	28,626	26,931	25,069	16,632	15,747	14,149	11,995	11,183	10,920
Home country ²	5,540	5,359	6,106	2,904	2,762	1,625	2,637	2,597	4,481
Abroad	23,086	21,572	18,963	13,728	12,986	12,524	9,358	8,586	6,439

¹ See footnote 1 to Table 1. The notional amounts outstanding are allocated to one of the locations listed in the table on an ultimate risk basis, ie according to the nationality of the counterparty. ² Home country means country of incorporation of the reporter's head office.

To derivatives statistics at end-December 2012

Table 9a

Herfindahl indices for all OTC interest rate derivatives contracts

	Can	adian do	ollar	Sı	wiss frar	nc		Euro		:	Sterling		Jap	oanese y	en	Swe	edish kr	ona	ι	JS dolla	r
	FRAs ¹	IRS ²	Opts.3																		
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
Jun 2011	1,250	795	1,716	1,773	1,424	1,302	613	578	635	907	928	1,037	1,880	579	1,077	820	846	2,006	981	849	831
Dec 2011	1,502	793	1,828	1,603	1,429	1,102	558	538	605	903	889	992	2,127	575	994	823	920	1,934	956	796	823
Jun 2012	1,273	785	2,033	1,729	1,508	990	608	549	607	931	867	979	2,202	559	895	996	904	2,129	1,022	764	804
Dec 2012	1,142	756	2,388	1,832	1,607	1,013	662	559	633	923	908	917	1,204	554	816	873	872	1,832	1,070	754	782

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

Table 9b
Herfindahl indices for all OTC foreign exchange derivatives contracts

	Forwards, forex swaps and currency swaps	Options
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
Jun 2011	551	648
Dec 2011	485	654
Jun 2012	487	691
Dec 2012	527	872

Table 9c

Herfindahl indices for all OTC equity-linked derivatives contracts

	Euro	ope	Jap	an	Latin A	merica	Other	· Asia	United	States
	Forwards and swaps	Options								
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	94:
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	78
Jun 2006	613	690	1,408	3,409	6,704	3,918	1,294	5,537	946	1,38
Dec 2006	687	775	1,278	3,158	7,199	3,902	1,066	5,615	1,487	75
Jun 2007	782	716	1,168	2,333	7,876	3,735	1,343	1,098	1,057	80.
Dec 2007	732	668	1,423	1,310	7,420	4,414	1,350	2,881	803	75
Jun 2008	707	706	1,044	989	5,979	6,290	1,180	1,249	847	74
Dec 2008	690	860	1,150	1,191	4,563	4,934	967	871	720	90
Jun 2009	921	981	981	1,512	4,687	6,181	949	1,105	773	1,14
Dec 2009	808	931	802	1,098	3,319	4,043	1,077	1,026	763	1,49
Jun 2010	850	1,124	693	1,013	3,900	6,467	1,219	1,192	877	1,41
Dec 2010	824	1,013	701	990	5,529	3,893	1,781	1,134	793	1,15
Jun 2011	709	923	832	1,067	2,078	2,369	1,200	1,176	814	1,23
Dec 2011	717	929	797	1,040	3,031	3,502	1,098	956	727	93
Jun 2012	781	933	757	1,191	2,511	3,112	1,187	1,053	736	96
Dec 2012	718	1,084	787	1,212	4,387	3,769	1,130	1,038	785	95

Table 9d

Herfindahl indices for OTC interest rate derivatives contracts between reporters¹

	Can	adian do	llar	Sv	wiss frar	nc		Euro		:	Sterling		Jap	oanese y	en	Swe	edish kr	ona	ι	JS dolla	r
	FRAs ²	IRS ³	Opts.4																		
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	1,630	964	591	529	652	956	857	999	1,056	538	1,053	862	1,140	1,982	1,153	803	837
Jun 2011	1,278	974	1,930	1,950	1,548	1,169	599	481	646	954	871	1,054	1,239	504	1,215	872	1,204	1,649	1,063	755	878
Dec 2011	1,508	979	2,066	1,666	1,489	1,036	550	424	655	988	815	1,025	2,144	501	1,120	880	1,289	1,641	1,054	732	867
Jun 2012	1,343	1,000	1,956	2,084	1,480	892	877	412	633	1,027	887	999	2,690	492	1,016	927	1,126	1,891	1,149	682	817
Dec 2012	1,303	1,136	2,691	3,058	1,400	925	1,056	411	662	908	870	942	3,401	495	897	897	1,055	1,655	1,033	686	804

¹Reporters (reporting dealers) are defined as those institutions whose head office is located in one of the 13 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 9e
Herfindahl indices for OTC foreign exchange derivatives
contracts between reporters¹

Period	Forwards, forex swaps and	Options
	currency swaps	
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	602	681
Dec 2010	606	689
Jun 2011	559	664
Dec 2011	488	671
Jun 2012	490	692
Dec 2012	541	937

¹ Reporters (reporting dealers) are defined as those institutions whose head office is located in one of the 13 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 9f

Herfindahl indices for OTC equity-linked derivatives contracts between reporters¹

	Euro	ope	Jap	an	Latin A	merica	Othei	- Asia	United	States
	Forwards and swaps	Options	Forwards and swaps	Options						
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	921	1,141	701	846	6,486	8,835	2,283	1,398	1,036	1,367
Jun 2011	793	963	1,036	894	5,894	2,444	1,307	1,489	963	1,179
Dec 2011	823	947	952	825	4,881	2,346	1,517	1,190	861	1,085
Jun 2012	916	995	1,020	913	4,425	3,456	2,060	1,258	799	1,144
Dec 2012	790	1,019	1,069	971	4,791	4,708	1,866	1,425	862	1,071

Reporters (reporting dealers) are defined as those institutions whose head office is located in one of the 13 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.

OTC derivatives statistics at end-December 2012

Table 9g

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

1	Canadian dollar Swiss franc		, iiitei e	Euro			Sterling			anese y			edish kr		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 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	1,112	1,049	748	938	1,975	1,148	1,744	3,051	937	1,040	1,707	875	3,453	1,334	1,112	1,550
Dec 2010	2,597	1,014	3,653	2,082	1,473	1,316	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
Jun 2011	2,581	753	1,961	2,000	1,412	1,705	771	669	759	1,197	976	1,232	4,373	868	899	1,253	813	3,012	936	921	942
Dec 2011	3,059	740	1,888	1,729	1,445	1,687	720	642	627	1,048	947	1,192	4,383	884	957	1,189	840	2,794	911	875	932
Jun 2012	1,945	778	2,381	1,652	1,703	1,523	736	656	682	1,035	954	1,211	3,413	850	944	1,347	895	3,192	1,053	857	933
Dec 2012	1,125	806	2,500	1,657	1,732	1,607	725	662	716	969	943	1,086	1,202	789	844	1,076	929	2,520	1,126	813	897

¹Reporters (reporting dealers) are defined as those institutions whose head office is located in one of the 13 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 9h

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

Period	Forwards, forex swaps and currency swaps	Options
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	690	936
Dec 2010	643	897
Jun 2011	570	684
Dec 2011	531	701
Jun 2012	541	758
Dec 2012	564	853

¹ Reporters (reporting dealers) are defined as those institutions whose head office is located in one of the 13 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 9i

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

	Europe		Jap	oan	Latin A	merica	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 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	1,45	
Jun 2004	879	2,227	3,114	4,446	3,839	6,678	1,536	6,013	1,276	1,06	
Dec 2004	767	852	2,165	1,810	6,352	4,534	1,282	2,275	1,242	1,28	
Jun 2005	837	794	2,330	1,583	7,270	4,623	1,313	1,616	929	85	
Dec 2005	767	814	3,014	2,080	7,122	5,481	1,431	6,399	1,187	96	
Jun 2006	803	721	1,942	3,099	6,857	3,971	1,240	7,619	1,234	1,61	
Dec 2006	748	1,140	1,645	4,896	7,330	3,953	1,189	7,309	1,709	89	
Jun 2007	822	1,073	1,582	4,599	8,167	3,842	1,549	1,513	1,415	92	
Dec 2007	603	965	1,316	2,197	7,603	4,486	1,483	5,165	1,028	86	
Jun 2008	949	918	1,217	1,786	6,809	6,527	1,207	1,841	1,014	83	
Dec 2008	729	1,066	1,038	2,688	4,747	5,063	1,091	1,262	825	1,05	
Jun 2009	872	1,325	1,304	2,984	5,335	6,404	962	1,254	848	1,57	
Dec 2009	805	1,447	1,051	2,115	3,754	4,178	1,209	1,233	862	2,36	
Jun 2010	910	1,325	993	2,515	5,009	6,478	1,329	1,224	1,142	2,01	
Dec 2010	873	990	936	2,231	6,254	2,807	2,209	1,074	897	1,34	
Jun 2011	745	995	1,308	2,579	2,329	2,863	1,476	1,045	986	1,77	
Dec 2011	702	926	978	3,533	3,461	3,983	1,364	1,183	849	91	
Jun 2012	773	895	867	3,702	2,806	3,841	1,334	1,173	899	99	
Dec 2012	729	1,082	938	2,504	4,915	4,392	1,266	1,384	952	98	

Reporters (reporting dealers) are defined as those institutions whose head office is located in one of the 13 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.