



BANK FOR INTERNATIONAL SETTLEMENTS



Statistical release

OTC derivatives statistics at end-December 2014

Monetary and Economic Department

April 2015

Queries concerning this release may be directed to statistics@bis.org.

This publication is available on the BIS website (www.bis.org).

© *Bank for International Settlements 2015. All rights reserved. Brief excerpts may be reproduced or translated provided the source is stated.*

1. OTC derivatives statistics at end-December 2014

Highlights from the latest BIS semiannual survey of over-the-counter (OTC) derivatives markets:

- OTC derivatives markets contracted in the second half of 2014. The notional amount of outstanding contracts fell by 9% between end-June 2014 and end-December 2014, from \$692 trillion to \$630 trillion. Exchange rate movements exaggerated the contraction of positions denominated in currencies other than the US dollar. Yet, even after adjusting for exchange rate movements, notional amounts were still down by about 3%.
- The gross market value of outstanding derivatives contracts – which provide a more meaningful measure of amounts at risk than notional amounts – rose sharply in the second half of 2014. Market values increased from \$17 trillion to \$21 trillion between end-June 2014 and end-December 2014, to their highest level since 2012. The increase was likely driven by pronounced moves in long-term interest rates and exchange rates during the period.
- Central clearing, a key element in global regulators' agenda for reforming OTC derivatives markets to reduce systemic risks, made further inroads. In credit default swap markets, the share of outstanding contracts cleared through central counterparties rose from 27% to 29% in the second half of 2014. In interest rate derivatives markets too, central clearing is becoming increasingly important.

More detail on these highlights is provided in Section 2 below. Definitions of terms and concepts are provided in Section 3 on page 7. Tables with the latest data are presented in Section 4 on page 14. Additional data, including time series, can be downloaded from the BIS website (www.bis.org/statistics/derdetailed.htm).

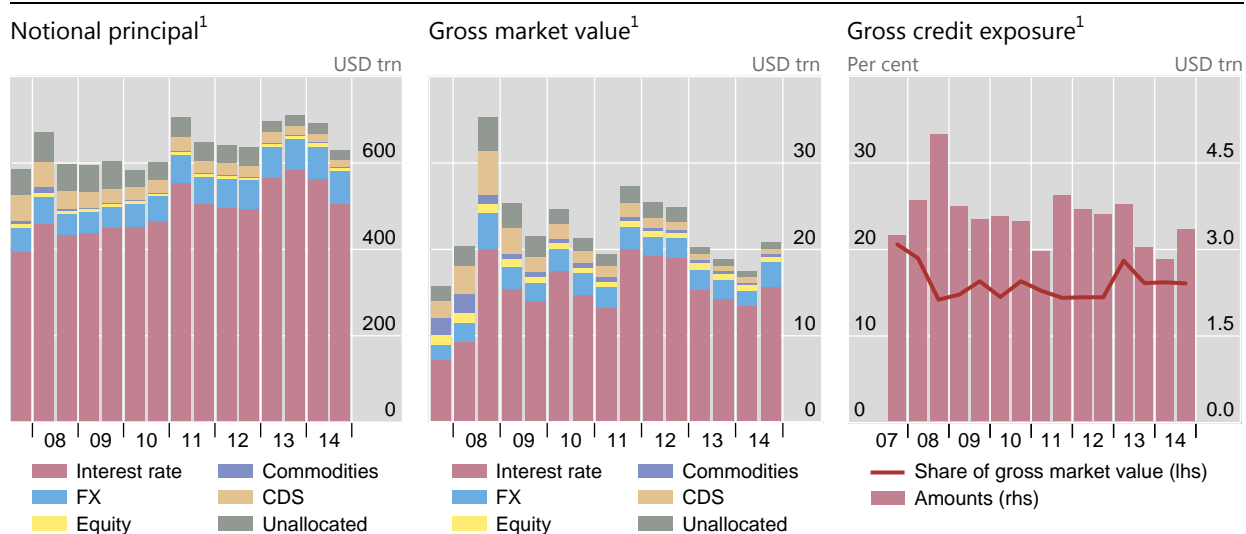
The OTC derivatives statistics at end-June 2015 will be released on or before 15 November 2015 (www.bis.org/statistics/relcal.htm).

2. Recent developments in OTC derivatives markets

The overall size of the over-the-counter derivatives market continued to contract in the second half of 2014. The notional amount of outstanding OTC derivatives contracts, which determines contractual payments and is one indicator of activity, fell by 9% between end-June 2014 and end-December 2014, from \$692 trillion to \$630 trillion (Table 1 and Graph 1, left-hand panel). Over this period, exchange rate movements exaggerated the contraction of positions denominated in currencies other than the US dollar.¹ Yet, even after adjusting for this effect, notional amounts at end-December 2014 were still about 3% lower than at end-June 2014.

The gross market value of outstanding derivatives contracts – that is, the cost of replacing all outstanding contracts at market prices prevailing on the reporting date – sharply increased in the second half of 2014. This contrasts with the downward trend of recent years. Market values stood at \$21 trillion at end-December 2014, their highest level since 2012 and up from \$17 trillion at end-June 2014 (Graph 1, centre panel).

¹ Positions are reported in US dollars and thus changes between periods include the impact of exchange rate movements on positions denominated in currencies other than the US dollar. For example, the depreciation of the euro and yen against the US dollar between end-June 2014 and end-December 2014 resulted in a decline in the reported US dollar value of positions denominated in euros and yen.



¹ At half year-end (end-June and end-December). Amounts denominated in currencies other than US dollars are converted to US dollars at the exchange rate prevailing on the reference date.

Source: BIS derivatives statistics.

The gross market value represents the maximum loss that market participants would incur if all counterparties failed to meet their contractual payments and the contracts were replaced at current market prices.² Market participants can reduce their exposure to counterparty credit risk through netting agreements and collateral. Accordingly, gross credit exposures adjust gross market values for legally enforceable bilateral netting agreements, although they do not take account of collateral. Gross credit exposures equalled \$3.4 trillion at end-December 2014, up from \$2.8 trillion at end-June 2014 (Table 1). This represented 16.1% of gross market values at end-December 2014, which was about the same share as reported at end-June 2014 and in line with the average since 2008 (Graph 1, right-hand panel).

Interest rate derivatives

The interest rate segment accounts for the majority of OTC derivatives activity. For single-currency interest rate derivatives at end-December 2014, the notional amount of outstanding contracts totalled \$505 trillion, which represented 80% of the global OTC derivatives market (Table 3). At \$381 trillion, swaps account for by far the largest share of outstanding interest rate derivatives.

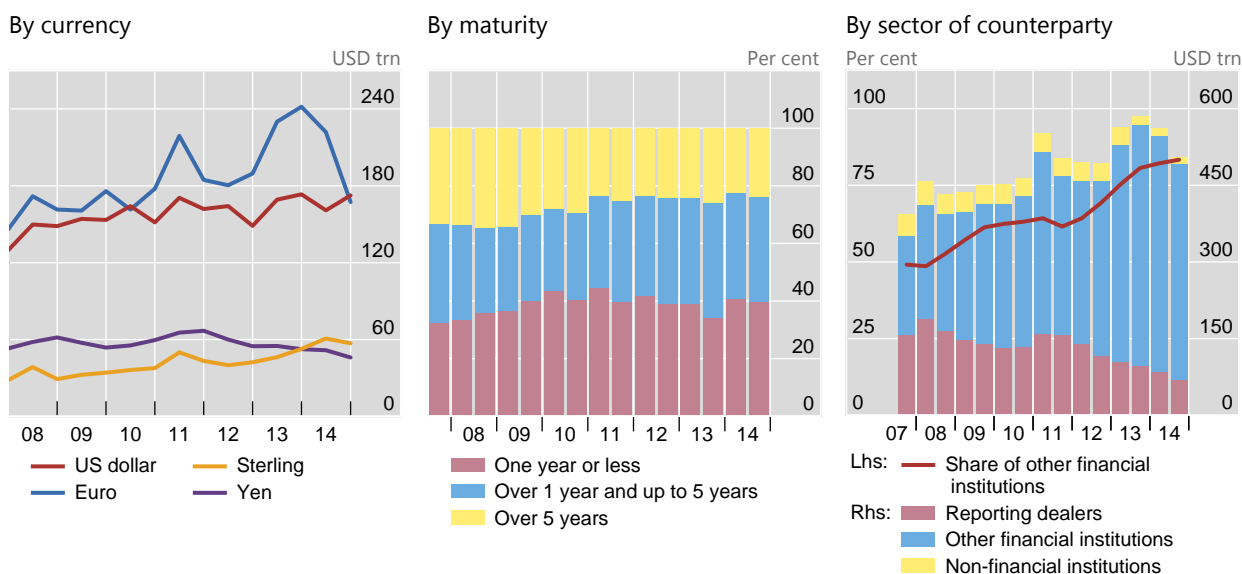
Notional amounts fell sharply in the second half of 2014, driven by a contraction in euro-denominated interest rate contracts (Graph 2, left-hand panel). The notional value of euro contracts declined from \$222 trillion to \$167 trillion between end-June 2014 and end-December 2014 (or equivalently from €162 trillion to €138 trillion). Trade compression to eliminate redundant contracts contributed to the decline. The volume of compressions picked up noticeably in 2014, especially of

² The gross market value is calculated as the sum of the absolute value of gross positive market values and gross negative market values. The gross positive market value is the gain to derivatives dealers – and the gross negative market value the loss – if the dealers were to sell their outstanding contracts at market prices prevailing on the reporting date.

OTC interest rate derivatives

Notional principal¹

Graph 2



¹ At half year-end (end-June and end-December). Amounts denominated in currencies other than US dollars are converted to US dollars at the exchange rate prevailing on the reference date.

Source: BIS derivatives statistics.

interest rate swaps cleared through central counterparties (CCPs).³ Another factor that likely contributed to the decline was reduced hedging activity in response to revised expectations regarding the outlook for monetary policy in the euro area.⁴

The notional value of interest rate contracts in other currencies increased in the second half of 2014. US dollar contracts increased from \$161 trillion to \$173 trillion between end-June 2014 and end-December 2014. Yen, pound sterling and Canadian dollar contracts also increased, after adjusting for the impact of exchange rate movements on the reported US dollar positions of interest rate derivatives denominated in these currencies.

The gross market value of interest rate derivatives increased in the second half of 2014, from \$13 trillion to \$16 trillion. Declines in long-term yields to, in many instances, new lows contributed to the increase in market values by widening the gap between market interest rates on the reporting date and rates prevailing at contract inception. Increases in market values were reported for interest rate derivatives denominated in all of the major currencies and were especially marked in pound sterling and Canadian dollar contracts (Table 3). The gross market value of euro-denominated contracts rose from \$7.4 trillion at end-June 2014 to \$8.2 trillion at end-December 2014 (or equivalently from €5.4 trillion to €6.7 trillion).

The overall decline in notional amounts was not accompanied by a significant change in the maturity distribution of interest rate derivatives. As a share of all maturities outstanding, contracts with maturities of over five years rose from 22% to 24% between end-June 2014 and end-December 2014

³ Compression is a process for tearing up trades that allows economically redundant derivative trades to be terminated early without changing each participant's net position. For statistics on multilateral compressions of CDS contracts, see TriOptima, www.trioptima.com/resource-center/statistics/triReduce.html.

⁴ See "A wave of further easing", *BIS Quarterly Review*, March 2015, pp 1–12, www.bis.org/publ/qtrpdf/r_qt1503a.htm.

(Graph 2, centre panel). Short- and medium-term contracts were roughly unchanged, at 40% and 37%, respectively.

The distribution of interest rate derivatives by counterparty points to a continued shift in activity towards financial institutions other than dealers, including CCPs. Central clearing is a key element in global regulators' agenda for reforming OTC derivatives markets to reduce systemic risks. The notional amount of interest rate contracts between derivatives dealers has been falling more or less steadily since 2008, to \$70 trillion at end-December 2014 compared with a peak of \$189 trillion at end-June 2008 (Graph 2, right-hand panel). Contracts between dealers and other financial institutions, including CCPs, stood at \$421 trillion at end-December 2014, down from \$463 trillion at end-June 2014. Notwithstanding this absolute decline in notional amounts, the relative importance of other financial institutions continued to increase in the second half of 2014; their share of all outstanding contracts rose to 83% at end-December 2014 from 82% at end-June 2014 and 49% at end-June 2008. The shift towards central clearing exaggerates the growth in notional amounts for other financial institutions because, when contracts are cleared through CCPs, one trade becomes two outstanding contracts.⁵

Turning to the concentration of derivatives activity among reporting dealers, as of end-December 2014 in many segments the concentration of dealers' positions had fallen to levels close to or below those reported prior to 2008 (Table 9a). Herfindahl indices for the US dollar interest rate swap (IRS) market had fallen back to 2007 levels, and for yen and euro markets to below 2007 levels. However, in the sterling and Swiss franc IRS markets, concentration remained well above 2007 levels.

Foreign exchange derivatives

Foreign exchange derivatives make up the second largest segment of the global OTC derivatives market. At end-December 2014, the notional amount of outstanding foreign exchange contracts totalled \$76 trillion, which represented 12% of OTC derivatives activity (Table 2). Contracts against the US dollar represented 89% of the notional amount outstanding at end-December 2014.

The gross market value of foreign exchange derivatives increased to its highest level for several years. It increased to \$2.9 trillion at end-December 2014 from \$1.7 trillion at end-June 2014 and \$2.4 trillion at end-June 2013. The marked appreciation of the US dollar against most other currencies contributed significantly to this increase. For example, at end-December 2014 the US dollar rose to its highest level in nine years against the euro, and in seven years against the yen. In the second half of 2014 the increase in the market value of contracts against the yen was especially pronounced, rising from \$0.4 trillion to \$0.8 trillion (or equivalently from ¥36 trillion to ¥95 trillion).

The latest data show little change in the instrument composition of foreign exchange derivatives. Forwards and foreign exchange swaps jointly accounted for close to half of the notional amount outstanding (Table 1). However, currency swaps – which typically have a longer maturity than other foreign exchange derivatives and thus are more sensitive to changes in market prices – accounted for the largest proportion of the gross market value.

In contrast to the interest rate derivatives market, in the foreign exchange derivatives market inter-dealer contracts continued to account for nearly as much activity as contracts with other financial institutions. The notional amount of outstanding foreign exchange contracts between reporting dealers totalled \$32 trillion at end-December 2014, and contracts with financial counterparties other than dealers \$34 trillion (Table 2). The inter-dealer share has averaged around 43% since 2011, up from

⁵ See N Vause, "Central clearing and OTC derivatives statistics", *BIS Quarterly Review*, June 2011, p 26, www.bis.org/publ/qtrpdf/r_qt1106x.htm.

less than 40% prior to 2011. Among instruments, inter-dealer activity accounts for a greater share of more complex contracts, such as currency swaps (53% of notional amounts) and options (46%).

Credit default swaps

While in 2007 credit derivatives had come close to surpassing foreign exchange derivatives as the second largest segment in the global OTC derivatives market, notional amounts have since declined more or less steadily. They fell to \$16 trillion at end-December 2014 from \$19 trillion at end-June 2014 and a peak of \$58 trillion at end-2007 (Graph 3, left-hand panel). The market value of CDS also continued to decline, to \$593 billion at end-December 2014 in gross terms and \$136 billion in net terms (Graph 3, right-hand panel). The net measure takes account of bilateral netting agreements covering CDS contracts but, unlike gross credit exposures, is not adjusted for cross-product netting.

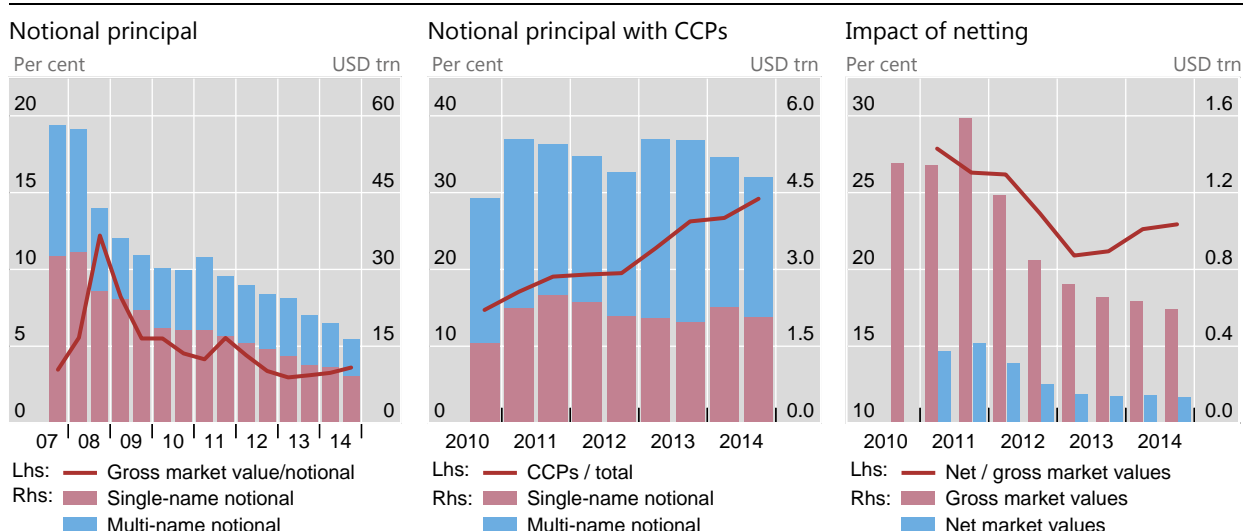
Recent declines in overall CDS activity reflected mainly a contraction in inter-dealer activity. The notional amount for contracts between reporting dealers fell from \$9.5 trillion at end-June 2014 to \$7.7 trillion at end-December 2014 (Table 4). Notional amounts with banks and securities firms also decreased in the second half of 2014, from \$2 trillion to \$1.3 trillion.

In line with the overall trend, notional amounts cleared through CCPs declined in absolute terms between end-June 2014 and end-December 2014, from \$5.2 trillion to \$4.8 trillion (Table 4). That said, as a proportion of all CDS activity, central clearing continued to make inroads. The share of outstanding contracts cleared through CCPs rose from less than 10% in 2010 (when data for CCPs were first reported separately) to 26% at end-2013 and 29% end-December 2014 (Graph 3, centre panel). The share of CCPs is highest for multi-name products, at 37%, and much lower for single-name products, at 23% (Table 4). Contracts on CDS indices in the multi-name segment are more amenable to central clearing, as they tend to be more standardised than those in the single-name segment.

While the shift towards central clearing had earlier contributed to an increase in netting, the latest data indicate that the trend towards netting may have stalled. Netting enables market participants to reduce their counterparty exposure by offsetting contracts with negative market values against contracts with positive market values. As a result of the increased use of legally enforceable

Credit default swaps¹

Graph 3



¹ At half year-end (end-June and end-December). Amounts denominated in currencies other than US dollars are converted to US dollars at the exchange rate prevailing on the reference date.

Source: BIS derivatives statistics.

bilateral netting agreements, net market values as a percentage of gross market values had fallen to 21% at end-2013 from 26% at end-2011 (Graph 3, right-hand panel). However, they rose to 23% at end-December 2014. The prevalence of netting is greatest for CDS contracts with other dealers and CCPs, where it reduced net market values as a percentage of gross values to 17% and 16%, respectively, at end-December 2014 (Table 4). Netting is least prevalent for contracts with insurance companies (84%) and non-financial customers (69%).

The distribution of underlying reference entities indicates that contracts referencing non-financial firms have declined at a somewhat faster pace than those referencing other sectors. Outstanding CDS contracts referencing non-financial firms stood at \$6 trillion at end-December 2014, representing 34% of all CDS (Table 7). This is down from 40% at end-2011 (when this breakdown was first reported). Contracts referencing financial firms and multiple sectors both stood at \$4 trillion at end-December 2014, followed by those referencing sovereigns at \$2 trillion. By rating, contracts referencing investment grade entities equalled \$10 trillion and those referencing lower-rated or unrated entities \$7 trillion (Table 5).

The distribution of outstanding CDS by location of the counterparty showed little change at end-December 2014. The CDS market is very international; CDS with counterparties from the same country in which the dealer is headquartered accounted for only 21% of outstanding contracts at end-June 2014, or \$3 trillion (Table 8). Most of the foreign counterparties were from Europe, followed by the United States.

Equity-linked and commodity derivatives

The notional amount of OTC derivatives linked to equities totalled \$8 trillion at end-December 2014, and the gross market value \$0.6 trillion (Table 1). Activity in equity-linked contracts declined precipitously during the 2007–09 global financial crisis, from a peak of \$10 trillion at end-June 2008 to an average of \$6 trillion between 2009 and 2012. Notional values have since rebounded, but market values have fluctuated around the same level for the past few years.

For OTC derivatives linked to commodity contracts, the latest data show no sign of a rebound from the sharp correction that occurred after the 2007–09 crisis. Dealers expanded their commodity derivatives business rapidly between 2004 and 2007 but subsequently scaled back their outstanding positions. From a peak of \$8 trillion at end-2007, the notional amount of outstanding OTC commodity derivatives contracts declined to \$3 trillion at end-2009 and less than \$2 trillion at end-2014. The gross market value of OTC commodity contracts stood at \$0.3 trillion at end-December 2014.

3. Explanatory notes

Participating authorities

Central banks and other authorities in the following 13 jurisdictions participate in the BIS's semiannual survey of OTC derivatives markets:

Australia	Reserve Bank of Australia	Netherlands	Netherlands Bank
Belgium	National Bank of Belgium	Spain	Bank of Spain
Canada	Bank of Canada	Sweden	Sveriges Riksbank
France	Bank of France		Statistics Sweden
Germany	Deutsche Bundesbank	Switzerland	Swiss National Bank
Italy	Bank of Italy	United Kingdom	Bank of England
Japan	Bank of Japan	United States	Board of Governors of the Federal Reserve System

Every three years, central banks and other authorities from an additional 34 jurisdictions participate in the Triennial Central Bank Survey. The latest Triennial Survey took place at end-December 2013; the results are available on the BIS website (www.bis.org/publ/rpfx13.htm).

The market share of dealers that participate in the semiannual survey varies across risk categories. It is highest in the credit, equity and interest rate segments (almost 100%, 98% and 97%, respectively, at end-June 2013) and lowest in the commodity and foreign exchange segments (both 90%). Overall, the results of the Triennial Survey indicate that the semiannual survey captures about 96% of global OTC derivatives activity.

Reporting basis

Data are reported on a consolidated basis. Data from all branches and (majority-owned) subsidiaries worldwide of a given institution are aggregated and reported by the parent institution to the official 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.

All data are reported to the BIS in US dollars, with positions in other currencies being converted into US dollars at the exchange rate prevailing at the end of each reporting period.

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: Gross market values are calculated as the sum 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.

Gross market values indicate the potential scale of market risk in derivatives transactions and of the associated financial risk transfer taking place. 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: Gross credit exposures are calculated as gross market values minus amounts netted with the same counterparty across all risk categories under legally enforceable bilateral netting agreements. In other words, the market value of dealers' claims and liabilities are netted when they are claims on and liabilities to the same counterparty and the reporting dealer and the counterparty have a valid, legally enforceable netting agreement. The absolute value of amounts across counterparties is then summed.

Gross credit exposures provide a measure of exposure to counterparty credit risk. However, they do not take collateral into account. Collateral would offset losses should the counterparty default.

Net market values: Net market values are calculated in the same way as gross credit exposures, except that netting is restricted to one type of derivative product instead of across all products. In the OTC derivatives statistics, net market values are reported for credit default swaps only.

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.
Currency swap:	Contract that commits two counterparties to exchange streams of interest 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 agreement (FRA):	Interest rate forward contract in which the rate to be paid or received on a 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 OTC options take 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 category.

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" are mainly 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.

- 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 asset-backed 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.

Elimination of 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:

- Notional amounts outstanding: Double-counting is eliminated by deducting half of the amount reported under the counterparty category "reporting dealers".
- 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.
- 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.

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

⁶ 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.

⁷ 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".

- 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.

Breakdowns collected for credit default swaps

Ratings

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)
- 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

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, all CDS contracts written on securitised products are classified as multi-name instruments. They can be decomposed into the following two components:
 - CDS on asset-backed and mortgage-backed securities
 - CDS on other securitised products (including collateralised debt obligations)
- Multi-sector: 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

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).

4. Tables

Table 1	Global OTC derivatives market.....	15
Table 2	Global OTC foreign exchange derivatives market	16
Table 3	Global OTC interest rate derivatives market	17
Table 4	Credit default swaps	18
Table 5	Credit default swap, by rating category.....	19
Table 6	Credit default swaps, by remaining maturity.....	20
Table 7	Credit default swaps, by sector.....	21
Table 8	Credit default swaps, by location of counterparty.....	22
Table 9	Herfindahl indices	
9a	OTC interest rate derivatives contracts	23
9b	OTC foreign exchange derivatives contracts	24
9c	OTC equity-linked derivatives contracts.....	25

Additional data, including time series, are available on the BIS website (www.bis.org/statistics/derdetailed.htm).

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

	Notional amounts outstanding				Gross market value			
	H1 2013	H2 2013	H1 2014	H2 2014	H1 2013	H2 2013	H1 2014	H2 2014
GRAND TOTAL	696,408	710,633	691,640	630,150	20,245	18,825	17,438	20,880
A. Foreign exchange contracts	73,121	70,553	74,782	75,879	2,427	2,284	1,724	2,944
Outright forwards and forex swaps	34,421	33,218	35,190	37,076	957	824	572	1,205
Currency swaps	24,654	25,448	26,141	24,204	1,131	1,186	939	1,351
Options	14,046	11,886	13,451	14,600	339	273	213	389
<i>Memo: Exchange-traded contracts²</i>	344	386	379	393	...	...	...	...
B. Interest rate contracts³	564,673	584,799	563,290	505,454	15,238	14,200	13,461	15,608
FRAs	86,892	78,810	92,575	80,836	168	108	126	145
Swaps	428,385	456,725	421,273	381,028	13,745	12,919	12,042	13,946
Options	49,396	49,264	49,442	43,591	1,325	1,174	1,292	1,517
<i>Memo: Exchange-traded contracts²</i>	62,160	56,951	65,624	57,222	...	...	...	...
C. Equity-linked contracts	6,821	6,560	7,084	7,941	692	700	678	615
Forwards and swaps	2,321	2,277	2,505	2,495	206	202	199	178
Options	4,501	4,284	4,579	5,446	486	498	479	437
<i>Memo: Exchange-traded contracts²</i>	6,614	6,760	7,460	7,243	...	...	...	...
D. Commodity contracts⁴	2,458	2,204	2,206	1,868	384	264	269	317
Gold	461	341	319	300	80	47	32	32
Other	1,997	1,863	1,887	1,568	304	217	237	285
Forwards and swaps	1,327	1,260	1,283	1,053	...	...	...	...
Options	670	603	604	515	...	...	...	...
E. Credit default swaps⁵	24,349	21,020	19,462	16,399	725	653	635	593
Single-name instruments	13,135	11,324	10,845	9,041	430	369	368	366
Multi-name instruments	11,214	9,696	8,617	7,358	295	284	266	227
Index products	...	8,746	7,939	6,747	...	...	...	...
F. Unallocated⁶	24,986	25,496	24,815	22,609	779	724	671	803
GROSS CREDIT EXPOSURE⁷	...	...	...	...	3,784	3,033	2,826	3,358
<i>Memo: Exchange-traded contracts^{2,8}</i>	69,117	64,098	73,462	64,858	...	...	...	...

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 3 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 2013. ⁷ Before 2011, excludes CDS contracts for all countries except the United States. ⁸ Excludes commodity and single equity 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 2013	H2 2013	H1 2014	H2 2014	H1 2013	H2 2013	H1 2014	H2 2014
Total contracts	73,121	70,553	74,782	75,879	2,427	2,284	1,724	2,944
With reporting dealers	30,690	31,206	31,971	31,933	992	1,011	709	1,315
With other financial institutions	31,757	30,552	33,700	34,334	999	887	693	1,163
With non-financial customers	10,674	8,794	9,111	9,612	437	386	321	466
Up to 1 year ³	53,677	51,198	55,115	56,831	...	...	...	...
Between 1 and 5 years ³	13,802	13,658	13,912	13,664	...	...	...	...
Over 5 years ³	5,642	5,696	5,756	5,384	...	...	...	...
US dollar	64,483	61,019	65,135	67,235	2,059	1,917	1,399	2,653
Euro	24,366	25,177	26,450	25,515	622	707	602	972
Yen	15,181	14,122	13,179	14,244	684	721	352	785
Sterling	8,435	8,789	9,184	8,420	207	256	243	241
Swiss franc	4,179	4,070	3,945	4,178	125	133	110	139
Canadian dollar	3,280	3,263	3,252	3,143	103	74	85	103
Swedish krona	1,389	1,407	1,334	1,117	35	28	24	41
Other	24,928	23,258	27,087	27,905	1,020	731	632	954
<i>Memo: Exchange-traded contracts⁴</i>	<i>344</i>	<i>386</i>	<i>379</i>	<i>393</i>	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>

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 2013	H2 2013	H1 2014	H2 2014	H1 2013	H2 2013	H1 2014	H2 2014
Total contracts	564,673	584,799	563,290	505,454	15,238	14,200	13,461	15,608
With reporting dealers	104,112	95,762	84,520	69,806	4,484	3,741	3,719	3,981
With other financial institutions	425,499	471,870	463,021	421,397	9,896	9,673	8,871	10,682
With non-financial customers	35,062	17,168	15,749	14,251	858	786	871	946
Up to 1 year ²	220,192	198,655	228,898	200,800	...	...	...	...
Between 1 and 5 years ²	207,966	234,352	208,309	184,661	...	...	...	...
Over 5 years ²	136,515	151,793	126,083	119,992	...	...	...	...
US dollar	169,196	173,382	160,805	172,546	4,736	4,314	3,246	3,601
Euro	229,989	241,668	221,855	167,267	7,407	6,989	7,362	8,185
Yen	55,092	52,551	51,706	46,127	715	696	759	798
Sterling	46,346	52,626	60,823	57,008	1,104	1,294	1,079	1,828
Swiss franc	5,583	5,750	5,343	4,776	113	121	113	128
Canadian dollar	9,342	10,385	10,471	10,086	146	139	126	163
Swedish krona	6,221	6,662	6,229	4,830	76	81	114	115
Other	42,904	41,777	46,059	42,814	941	566	661	790
<i>Memo: Exchange-traded contracts³</i>	<i>62,160</i>	<i>56,951</i>	<i>65,624</i>	<i>57,222</i>	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>

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

	Notional amounts outstanding						Gross market values		Net market values
	H1 2014			H2 2014			H1 2014	H2 2014	H2 2014
	Bought	Sold	Total	Bought	Sold	Total			
Total contracts	14,779	14,224	19,462	12,227	11,889	16,399	635	593	136
With reporting dealers	9,515	9,565	9,540	7,697	7,737	7,717	313	289	49
With other financial institutions	5,141	4,578	9,719	4,413	4,072	8,485	313	296	81
Central counterparties ²	2,696	2,499	5,196	2,407	2,383	4,790	143	144	23
Banks and security firms	1,098	945	2,042	743	605	1,348	70	46	10
Insurance firms	139	58	197	142	74	216	6	7	6
SPVs, SPCs and SPEs	179	91	270	145	74	219	15	12	6
Hedge funds	490	623	1,112	364	450	814	45	42	14
Other financial customers	539	363	901	612	485	1,098	33	44	22
With non-financial customers	123	80	203	117	80	197	9	8	6
Single-name credit default swaps	8,639	8,464	10,845	7,123	7,037	9,041	368	366	...
With reporting dealers	6,221	6,294	6,258	5,101	5,137	5,119	214	207	...
With other financial institutions	2,350	2,135	4,486	1,959	1,867	3,826	150	154	...
Central counterparties ²	1,174	1,090	2,264	1,046	1,014	2,059	59	67	...
Banks and security firms	648	532	1,180	438	340	779	41	28	...
Insurance firms	73	25	99	38	19	57	4	3	...
SPVs, SPCs and SPEs	61	37	97	50	33	83	8	7	...
Hedge funds	171	303	474	138	240	378	22	24	...
Other financial customers	223	149	373	248	221	470	16	25	...
With non-financial customers	67	34	101	63	33	96	5	4	...
Multi-name credit default swaps	6,140	5,760	8,617	5,104	4,852	7,358	266	227	...
With reporting dealers	3,294	3,271	3,282	2,596	2,600	2,598	99	82	...
With other financial institutions	2,791	2,443	5,233	2,455	2,204	4,659	162	142	...
Central counterparties ²	1,522	1,410	2,932	1,362	1,369	2,731	84	77	...
Banks and security firms	450	413	863	305	264	569	29	19	...
Insurance firms	66	33	99	104	55	159	3	4	...
SPVs, SPCs and SPEs	119	54	173	94	42	136	8	5	...
Hedge funds	318	320	638	226	210	436	22	18	...
Other financial customers	315	213	529	364	264	628	17	19	...
With non-financial customers	56	46	102	53	47	101	5	4	...
of which: index products	5,592	5,392	7,939	4,624	4,531	6,747	...	...	...
With reporting dealers	3,054	3,038	3,046	2,408	2,407	2,407	...	...	...
With other financial institutions	2,511	2,326	4,837	2,192	2,095	4,287	...	...	...
Central counterparties ²	1,521	1,407	2,929	1,358	1,362	2,720	...	...	...
Banks and security firms	378	359	736	253	223	477	...	...	...
Insurance firms	44	30	74	64	51	116	...	...	...
SPVs, SPCs and SPEs	69	51	120	49	39	88	...	...	...
Hedge funds	297	313	610	203	204	407	...	...	...
Other financial customers	202	166	368	265	215	480	...	...	...
With non-financial customers	27	28	55	24	29	53	...	...	...

¹ 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. ² Both contracts post-novation are captured.

Table 5
Credit default swaps, by rating category¹
Notional amounts outstanding, in billions of US dollars

	Total			Investment grade (AAA-BBB)			Non-investment grade (BB and below)			Non-rated ²		
	H2 2013	H1 2014	H2 2014	H2 2013	H1 2014	H2 2014	H2 2013	H1 2014	H2 2014	H2 2013	H1 2014	H2 2014
Total contracts	21,020	19,462	16,399	13,205	12,606	9,741	4,867	4,223	3,599	2,948	2,634	3,059
With reporting dealers	11,053	9,540	7,717	7,007	6,172	4,798	2,486	2,003	1,489	1,559	1,365	1,430
With other financial institutions	9,779	9,719	8,485	6,111	6,332	4,854	2,312	2,153	2,035	1,356	1,235	1,596
Central counterparties ³	5,518	5,196	4,790	3,610	3,412	2,730	1,364	1,196	1,276	544	588	784
Banks and security firms	1,724	2,042	1,348	1,087	1,317	789	452	475	308	185	249	251
Insurance firms	209	197	216	102	100	119	44	30	30	63	67	67
SPVs, SPCs and SPEs	363	270	219	191	180	112	42	54	43	129	37	64
Hedge funds	1,034	1,112	814	699	810	530	209	217	167	125	85	117
Other financial customers	931	901	1,098	421	514	574	201	180	211	309	208	313
With non-financial customers	188	203	197	87	101	88	69	67	75	32	35	33
Single-name credit default swaps	11,324	10,845	9,041	8,369	7,546	6,059	2,350	2,129	1,676	605	1,169	1,306
With reporting dealers	7,215	6,258	5,119	5,071	4,229	3,413	1,750	1,359	982	394	669	724
With other financial institutions	4,010	4,486	3,826	3,231	3,248	2,581	578	756	677	201	482	568
Central counterparties ³	1,964	2,264	2,059	1,745	1,723	1,396	173	323	367	47	217	297
Banks and security firms	1,035	1,180	779	796	850	538	188	221	118	50	109	122
Insurance firms	78	99	57	52	42	38	17	12	6	8	45	14
SPVs, SPCs and SPEs	84	97	83	57	60	52	17	23	20	10	15	11
Hedge funds	448	474	378	297	311	239	113	117	91	38	46	48
Other financial customers	402	373	470	284	262	318	70	61	76	48	51	76
With non-financial customers	99	101	96	66	69	65	22	14	17	10	18	15
Multi-name credit default swaps	9,696	8,617	7,358	4,837	5,059	3,682	2,516	2,093	1,923	2,343	1,465	1,753
With reporting dealers	3,837	3,282	2,598	1,936	1,943	1,385	736	644	507	1,165	695	706
With other financial institutions	5,769	5,233	4,659	2,880	3,084	2,273	1,734	1,397	1,358	1,155	753	1,028
Central counterparties ³	3,554	2,932	2,731	1,866	1,688	1,334	1,191	873	910	497	371	487
Banks and security firms	689	863	569	291	467	250	264	255	190	135	141	129
Insurance firms	132	99	159	50	58	82	27	18	24	55	23	53
SPVs, SPCs and SPEs	279	173	136	135	120	60	25	31	23	120	22	53
Hedge funds	586	638	436	402	498	292	97	100	76	88	39	68
Other financial customers	529	529	628	137	252	256	131	119	135	261	157	237
With non-financial customers	89	102	101	21	33	24	46	53	59	22	17	19

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			One year or less			Over one year up to five years			Over five years		
	H2 2013	H1 2014	H2 2014	H2 2013	H1 2014	H2 2014	H2 2013	H1 2014	H2 2014	H2 2013	H1 2014	H2 2014
Total contracts	21,020	19,462	16,399	3,655	3,718	3,010	16,162	14,491	12,367	1,203	1,252	1,022
With reporting dealers	11,053	9,540	7,717	2,202	2,087	1,725	8,297	6,957	5,594	554	496	398
With other financial institutions	9,779	9,719	8,485	1,438	1,616	1,266	7,728	7,387	6,626	614	716	593
Central counterparties ²	5,518	5,196	4,790	777	786	643	4,517	4,140	3,913	224	269	234
Banks and security firms	1,724	2,042	1,348	366	458	280	1,264	1,469	989	94	115	79
Insurance firms	209	197	216	27	22	15	147	136	168	35	39	33
SPVs, SPCs and SPEs	363	270	219	41	39	23	292	200	175	29	31	22
Hedge funds	1,034	1,112	814	120	198	137	798	777	580	116	137	97
Other financial customers	931	901	1,098	106	112	169	709	666	801	116	123	128
With non-financial customers	188	203	197	15	15	18	138	147	147	35	40	31
Single-name credit default swaps	11,324	10,845	9,041	2,565	2,305	1,922	8,059	7,827	6,576	700	713	543
With reporting dealers	7,215	6,258	5,119	1,692	1,370	1,135	5,161	4,563	3,738	362	325	246
With other financial institutions	4,010	4,486	3,826	862	925	772	2,827	3,195	2,776	321	367	278
Central counterparties ²	1,964	2,264	2,059	437	480	433	1,429	1,670	1,526	98	114	100
Banks and security firms	1,035	1,180	779	279	307	192	688	795	537	67	78	51
Insurance firms	78	99	57	12	12	7	48	66	34	17	21	16
SPVs, SPCs and SPEs	84	97	83	10	16	11	60	64	61	14	17	11
Hedge funds	448	474	378	46	52	53	340	348	281	62	74	44
Other financial customers	402	373	470	78	58	77	261	251	337	63	63	56
With non-financial customers	99	101	96	10	10	15	71	70	63	17	21	19
Multi-name credit default swaps	9,696	8,617	7,358	1,090	1,414	1,088	8,104	6,664	5,791	502	540	479
With reporting dealers	3,837	3,282	2,598	509	717	590	3,136	2,394	1,856	192	171	152
With other financial institutions	5,769	5,233	4,659	576	691	494	4,901	4,193	3,850	292	349	316
Central counterparties ²	3,554	2,932	2,731	340	306	210	3,089	2,470	2,387	125	156	134
Banks and security firms	689	863	569	87	151	89	576	674	452	27	37	28
Insurance firms	132	99	159	15	10	7	99	70	134	18	18	17
SPVs, SPCs and SPEs	279	173	136	32	23	12	232	136	113	15	14	11
Hedge funds	586	638	436	74	147	84	459	428	299	54	63	53
Other financial customers	529	529	628	28	54	92	448	415	464	53	60	72
With non-financial customers	89	102	101	5	5	4	67	77	85	18	19	12

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

Table 7

Credit default swaps, by sector¹

Notional amounts outstanding, in billions of US dollars

	Total ²		Sovereigns		Financial firms		Non-financial firms		Securitised products		Multiple sectors	
	H1 2014	H2 2014	H1 2014	H2 2014	H1 2014	H2 2014	H1 2014	H2 2014	H1 2014	H2 2014	H1 2014	H2 2014
Total contracts	19,462	16,399	2,686	2,467	5,000	3,962	6,539	5,624	480	227	4,756	4,117
With reporting dealers	9,540	7,717	1,822	1,616	2,534	2,002	3,310	2,756	287	116	1,586	1,226
With other financial institutions	9,719	8,485	840	827	2,423	1,922	3,186	2,823	182	102	3,087	2,810
Central counterparties ³	5,196	4,790	240	294	1,148	896	1,972	1,736	7	7	1,829	1,857
Banks and security firms	2,042	1,348	311	254	547	419	601	392	79	24	504	260
Insurance firms	197	216	12	15	64	30	54	53	17	8	50	109
SPVs, SPCs and SPEs	270	219	22	17	70	60	61	58	11	6	107	79
Hedge funds	1,112	814	129	103	404	302	313	257	41	36	226	115
Other financial customers	901	1,098	127	144	190	215	186	328	27	20	372	390
With non-financial customers	203	197	23	25	43	39	43	44	12	9	82	80
Single-name credit default swaps	10,845	9,041	2,587	2,354	2,831	2,143	5,427	4,544	0	0	0	0
With reporting dealers	6,258	5,119	1,751	1,543	1,768	1,342	2,739	2,233	0	0	0	0
With other financial institutions	4,486	3,826	813	787	1,022	764	2,650	2,274	0	0	0	0
Central counterparties ³	2,264	2,059	240	293	379	308	1,644	1,459	0	0	0	0
Banks and security firms	1,180	779	296	227	335	216	548	336	0	0	0	0
Insurance firms	99	57	11	13	53	14	34	31	0	0	0	0
SPVs, SPCs and SPEs	97	83	16	14	28	20	54	49	0	0	0	0
Hedge funds	474	378	127	101	112	85	235	192	0	0	0	0
Other financial customers	373	470	123	139	114	122	135	208	0	0	0	0
With non-financial customers	101	96	22	23	41	37	38	36	0	0	0	0
Multi-name credit default swaps	8,617	7,358	99	114	2,168	1,819	1,112	1,080	480	227	4,756	4,117
With reporting dealers	3,282	2,598	71	73	766	660	571	523	287	116	1,586	1,226
With other financial institutions	5,233	4,659	27	40	1,400	1,157	536	549	182	102	3,087	2,810
Central counterparties ³	2,932	2,731	0	1	769	588	327	277	7	7	1,829	1,857
Banks and security firms	863	569	15	27	211	202	53	56	79	24	504	260
Insurance firms	99	159	0	3	10	16	20	23	17	8	50	109
SPVs, SPCs and SPEs	173	136	6	2	42	40	7	9	11	6	107	79
Hedge funds	638	436	2	2	292	217	78	65	41	36	226	115
Other financial customers	529	628	3	5	76	93	50	120	27	20	372	390
With non-financial customers	102	101	1	2	2	2	5	8	12	9	82	80

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 reporting dealers			With non-reporters		
	H2 2013	H1 2014	H2 2014	H2 2013	H1 2014	H2 2014	H2 2013	H1 2014	H2 2014
All locations	21,020	19,462	16,399	11,053	9,540	7,717	9,967	9,922	8,682
Home country ²	4,091	3,734	3,423	1,932	1,808	1,633	2,159	1,926	1,790
Abroad	16,929	15,728	12,976	9,121	7,732	6,084	7,808	7,996	6,892
United States	4,486	4,014	3,412	2,147	1,703	1,341	2,339	2,310	2,071
Japan	162	151	117	110	94	71	51	57	45
European developed countries	10,871	10,173	8,205	6,800	5,854	4,607	4,071	4,318	3,599
Latin America	780	785	686	3	2	2	777	783	684
Other Asian countries	170	148	127	7	26	17	162	122	110
All other countries	461	458	430	53	52	47	408	406	383

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.

Table 9a

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 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	1,160	1,069	2,939	1,839	1,336	947	568	621	639	1,218	919	867	2,793	738	851	1,124	730	1,301	891	790	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	599	544	607	931	867	979	2,202	559	895	987	931	2,129	1,019	764	804
Dec 2012	1,142	756	2,388	1,832	1,607	1,013	649	549	633	923	908	917	1,204	554	816	859	908	1,832	1,066	754	782
Jun 2013	1,023	777	2,040	1,795	1,527	1,005	655	539	647	978	880	940	1,116	550	770	830	922	3,043	923	693	767
Dec 2013	1,029	812	2,660	1,798	1,526	1,042	687	540	664	1,110	839	898	1,446	567	762	897	969	1,978	857	666	773
Jun 2014	1,960	859	2,171	2,138	1,515	1,008	728	511	652	1,353	858	936	1,482	600	744	646	626	337	886	640	793
Dec 2014	1,674	925	2,762	2,067	1,515	968	701	486	667	1,529	888	946	2,244	626	734	878	1,008	1,873	892	652	784

¹ Forward rate agreements. ² Interest rate swaps. ³ Interest 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	651
Jun 2012	487	689
Dec 2012	527	872
Jun 2013	496	902
Dec 2013	472	728
Jun 2014	462	719
Dec 2014	459	731

Table 9c

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 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	729	860	1,100	1,191	4,566	4,934	989	871	743	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	1,124	693	1,013	3,900	6,467	1,219	1,192	877	1,416
Dec 2010	824	1,013	701	990	5,529	3,893	1,781	1,134	793	1,152
Jun 2011	709	923	832	1,067	2,078	2,369	1,200	1,176	814	1,239
Dec 2011	717	929	797	1,040	3,031	3,502	1,098	956	727	931
Jun 2012	781	933	757	1,191	2,511	3,112	1,187	1,053	736	966
Dec 2012	718	1,084	787	1,211	4,387	3,769	1,130	1,038	785	953
Jun 2013	789	940	915	1,404	4,606	3,495	1,162	1,078	735	940
Dec 2013	720	1,047	1,230	1,514	4,595	4,515	1,012	1,170	808	928
Jun 2014	681	977	2,255	1,123	4,466	3,032	1,075	1,711	836	1,012
Dec 2014	774	1,961	2,541	1,213	4,482	2,875	1,190	1,818	819	1,249