



BANK FOR INTERNATIONAL SETTLEMENTS



Statistical release

OTC derivatives statistics at end-December 2013

Monetary and Economic Department

May 2014

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 2014. All rights reserved. Brief excerpts may be reproduced or translated provided the source is stated.*

1. OTC derivatives statistics at end-December 2013

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

- OTC derivatives markets continued to expand in the second half of 2013. The notional amount of outstanding contracts totalled \$710 trillion at end-2013, up from \$693 trillion at end-June 2013 and \$633 trillion at end-2012.
- Even as notional amounts rose, the gross market value of outstanding OTC derivatives declined to \$19 trillion at end-2013, from \$20 trillion at end-June 2013 and \$25 trillion at end-2012. The decline was driven by interest rate derivatives and, in particular, by a narrowing between market interest rates on the reporting date and the rates prevailing at the inception of the contracts.
- In credit default swap (CDS) markets, central clearing and netting made further inroads. Contracts with central counterparties accounted for 26% of notional CDS outstanding at end-2013. Bilateral netting agreements reduced the net market value of outstanding CDS contracts, which provide a measure of exposure to counterparty credit risk, to 21% of their gross market value.

Recent developments in OTC derivatives markets are summarised in Section 2 (pp 2–7). The methodology for compiling the OTC derivatives statistics is explained in Section 3 (pp 8–14), and tables with the latest data are presented in Section 4 (pp 15–26). Additional data, including time series, are available on the BIS website (www.bis.org/statistics/derdetailed.htm).

The OTC derivatives statistics at end-June 2014 will be released on or before 15 November 2014 (www.bis.org/statistics/relical.htm).

2. Recent developments in OTC derivatives markets

The over-the-counter derivatives market continued to expand in the second half of 2013. The notional amount of outstanding OTC derivatives contracts, which determines contractual payments and is an indicator of activity in OTC derivatives markets, totalled \$710 trillion at end-December 2013 (Table 1). This compares with \$693 trillion at end-June 2013 and \$633 trillion at end-2012 (Graph 1, left-hand panel). Adjusted for exchange rate movements, notional amounts at end-2013 were about 1% higher than at end-June 2013 and 13% higher than at end-2012.¹

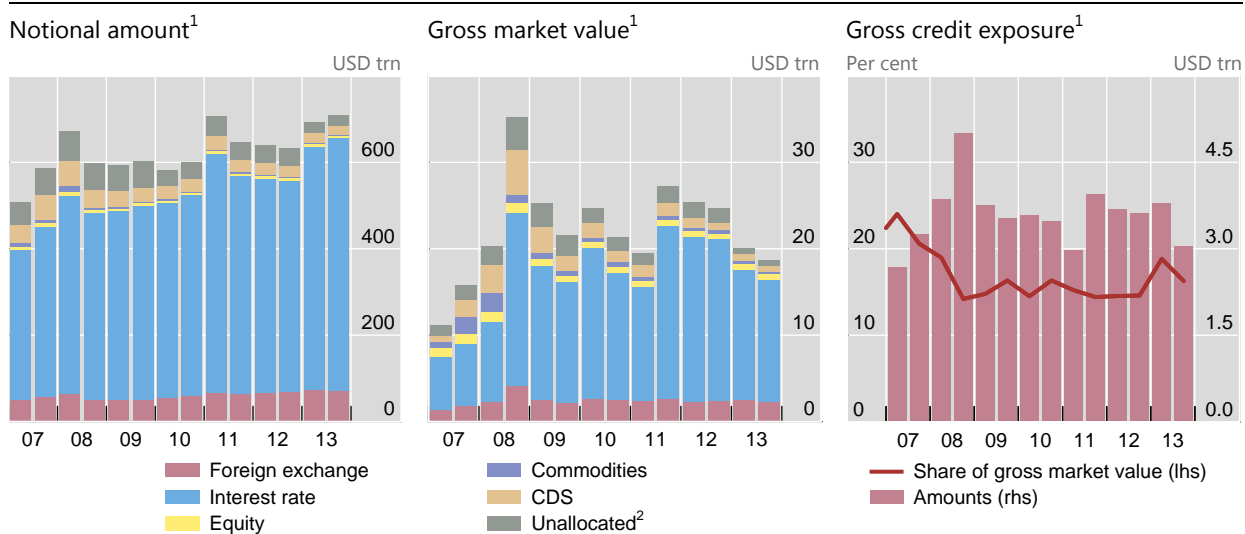
Notwithstanding the increase in notional amounts, the market value of outstanding derivatives contracts declined, based on market prices at end-December 2013. The gross market value of all contracts – that is, the cost of replacing all outstanding contracts at market prices prevailing on the reporting date – stood at \$19 trillion at end-December 2013. This is down from \$20 trillion at end-June 2013 and \$25 trillion at end-2012 (Graph 1, centre panel).

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 could be replaced at current market prices.² Market participants can reduce their exposure to counterparty credit risk through netting agreements and collateral. Gross credit exposures adjust gross market values for legally

Global OTC derivatives market

Outstanding positions, by data type and risk category

Graph 1



¹ For definitions, see the explanatory notes in Section 3. ² Outstanding OTC derivatives positions of dealers that do not participate in the BIS's semiannual survey. Estimated by the BIS based on the Triennial Survey of foreign exchange and derivatives activity.

Source: BIS OTC derivatives statistics.

¹ The appreciation of the euro and pound sterling against the US dollar between end-June 2013 and end-December 2013 resulted in an increase in the US dollar value of outstanding contracts denominated in euros and sterling. Conversely, the depreciation of the Japanese yen against the US dollar resulted in a decline in the US dollar value of yen-denominated contracts.

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.

enforceable bilateral netting agreements but do not take account of collateral. Gross credit exposures equalled \$3.0 trillion at end-December 2013, down from \$3.8 trillion at end-June 2013 (Graph 1, right-hand panel). This represented 16.3% of gross market values at end-December 2013, which was a bit higher than the 2009–12 average of 15.1%.

Interest rate derivatives

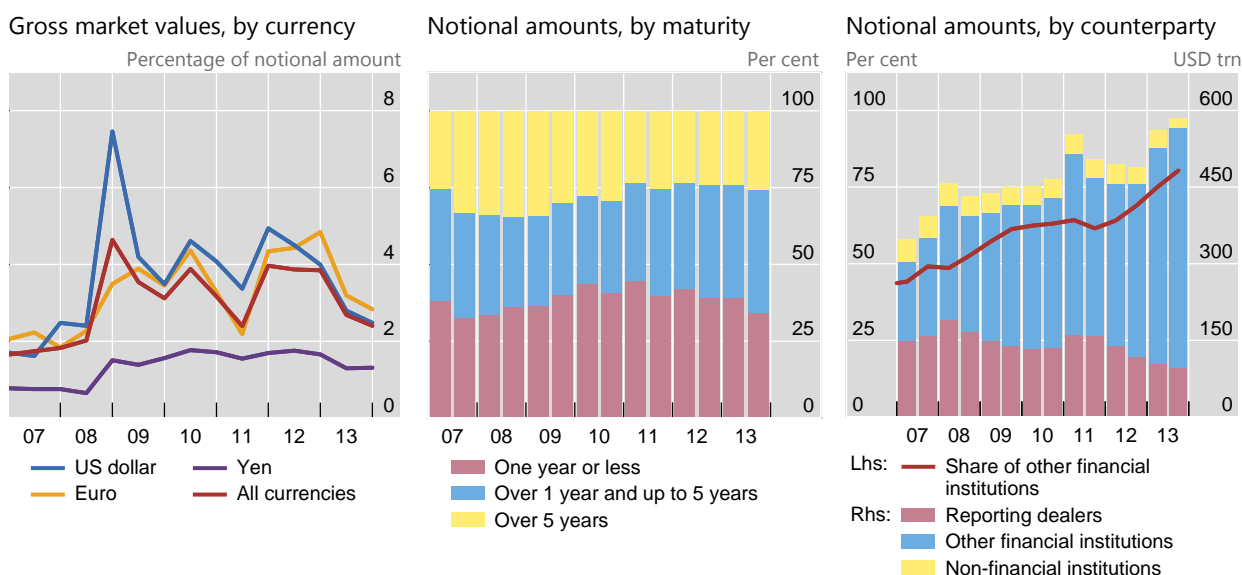
The interest rate segment accounts for the majority of OTC derivatives activity. For single currency interest rate derivatives at end-December 2013, the notional amount of outstanding contracts totalled \$584 trillion, which represented 82% of the global OTC derivatives market (Table 3). At \$461 trillion, swaps account for by far the largest share of outstanding interest rate derivatives.

The recent trend in the global market of increasing notional amounts but declining market values was driven by developments in the interest rate segment. Even as notional amounts rose, the gross market value of interest rate derivatives declined to \$14 trillion at end-2013, from \$15 trillion at end-June 2013 and its most recent peak of \$20 trillion at end-2011. Such declines were reported for interest rate derivatives denominated in most of the major currencies (Graph 2, left panel). Long-term bond yields and swap rates in these currencies rose in mid-2013 after announcements in May that the US Federal Reserve envisaged phasing out quantitative easing.³ The decline in the gross market value of interest rate derivatives over this period suggests that the bond market sell-off narrowed the gap between market interest rates on the reporting date and the rates prevailing at contract inception.⁴

Increases in the notional amount of interest rate derivatives were concentrated in the medium- and long-term segments. The notional amount of contracts with a remaining maturity of one to five years rose to \$234 trillion at end-2013 from \$180 trillion one year earlier, or to 40% of all

OTC interest rate derivatives

Graph 2



Source: BIS OTC derivatives statistics.

³ See BIS, "Markets precipitate tightening", *BIS Quarterly Review*, September 2013, pp 1–11, www.bis.org/publ/qtrpdf/r_qt1309a.htm.

⁴ At the inception of an interest rate swap contract, the market value is zero, ie the expected value of fixed interest rate cash flows over the life of the swap is equal to the expected value of floating interest rate cash flows.

maturities outstanding from 37% (Graph 2, centre panel). The notional amount of contracts with a remaining maturity greater than five years rose to \$152 trillion from \$119 trillion over the same period, or to 26% of all maturities from 24%. The increased activity in the medium- and long-term segments may have reflected investors' changing expectations about the persistence of low policy rates and large-scale asset purchases by central banks over the medium term.⁵

The distribution of interest rate derivatives by counterparties points to a continued shift in activity towards financial institutions other than dealers, including central counterparties (CCPs). The notional amount of interest rate contracts between derivatives dealers has been falling steadily since 2011, to \$96 trillion at end-2013 compared with the (post-2008) peak of \$159 trillion at end-June 2011 (Graph 2, right-hand panel). Contracts between dealers and other financial institutions stood at \$470 trillion at end-2013, or 80% of all contracts, up from \$355 trillion, or 64%, at end-June 2011. 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.⁶

The latest data show a sharp drop in the notional amount reported for interest rate contracts with non-financial customers. This drop is explained by a dealer's reclassification of contracts with central counterparties, which it had previously incorrectly reported against non-financial customers but, starting in December 2013, reported against other financial institutions.

Turning to the concentration of derivatives activity among dealers, as of end-December 2013 concentration in many segments had fallen to levels close to or below those reported prior to 2008. Herfindahl indices calculated based on notional amounts provide a measure of how concentrated the market shares of individual dealers are. In most segments of interest rate derivatives markets, concentration rose in 2008–09 and then declined in 2010–11 (Table 9a). As of end-2013, Herfindahl indices for the US dollar and euro interest rate swap (IRS) markets had fallen back almost to 2007 levels, and for yen and Canadian dollar markets to below 2007 levels. However, in the sterling, Swiss franc and Swedish krona 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 2013, the notional amount of outstanding foreign exchange contracts totalled \$71 trillion, which represented 10% of OTC derivatives activity (Table 2).

The latest data show little change in the instrument composition of foreign exchange derivatives. Forwards and foreign exchange swaps 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 \$31 trillion at end-December 2013, and contracts with financial counterparties other than dealers about the same amount. The inter-dealer share has averaged around 43% since 2011, up from less than 40% prior to 2011. Inter-dealer activity is especially significant in the yen and US dollar

⁵ See BIS, "Low rates spur credit markets as banks lose ground", *BIS Quarterly Review*, December 2013, pp 1–12, www.bis.org/publ/qtrpdf/r_qt1312a.htm.

⁶ See N Vause, "Central clearing and OTC derivatives statistics", *BIS Quarterly Review*, June 2011, p 26, www.bis.org/publ/qtrpdf/r_qt1106x.htm.

markets, where it accounted for 52% and 47%, respectively, of notional amounts at end-December 2013. Among instruments, inter-dealer activity accounts for a greater share of more complex contracts, such as currency swaps (54% of notional amounts) and options (49%).

While the importance of inter-dealer activity differs in the BIS's two surveys of derivatives activity – the semiannual survey of outstanding positions, on which this release is based, and the Triennial Survey of turnover – this mainly reflected differences in the structure of the surveys. The 2013 Triennial Survey pointed to other financial institutions, including smaller banks, institutional investors and hedge funds, as the main drivers of rising trading volumes in foreign exchange markets.⁷ This development appears to reflect trading in simpler instruments with shorter maturities, such as spot and forward transactions. The OTC derivatives statistics on outstanding contracts suggest that the major dealers continue to dominate activity in more complex, longer-term instruments, such as currency swaps. Indeed, in the foreign exchange derivatives market, inter-dealer activity accounted for 58% of notional amounts for contracts with a remaining maturity of more than five years, compared with only 40% of contracts with a maturity of one year or less. In addition, whereas outstanding positions (in the OTC derivatives statistics) are reported by dealers on a globally consolidated basis, turnover data (in the Triennial Survey) are reported by sales desks and include transactions between affiliates of the same reporting institution.

Credit default swaps

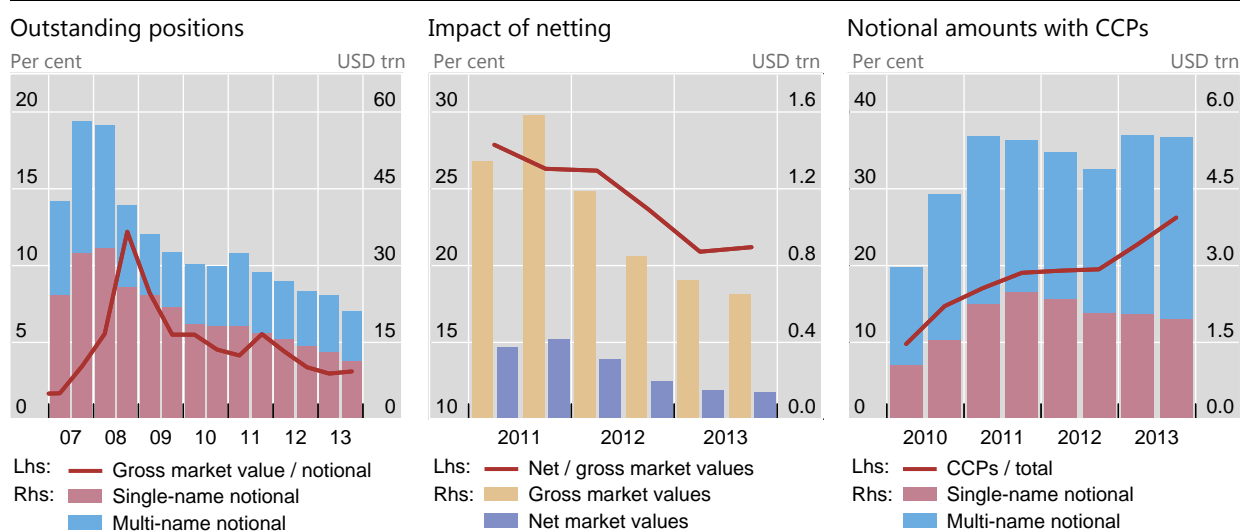
In 2007, credit derivatives had come close to surpassing foreign exchange derivatives as the second largest segment in the global OTC derivatives market, but notional amounts have since declined steadily. Notional amounts of CDS fell to \$21 trillion at end-2013 from \$29 trillion at end-2011 and a peak of \$58 trillion at end-2007 (Graph 3, left-hand panel). The gross market value of CDS fell to \$0.7 trillion at end-2013, from \$1.6 trillion at end-2011 (Graph 3, centre panel). The net market value fell to \$139 billion from \$417 billion over the same period. This net measure takes account of bilateral netting agreements covering CDS contracts but, unlike gross credit exposures, is not adjusted for cross-product netting.

The decline in overall CDS activity was driven mainly by a contraction in inter-dealer activity. The notional amount for contracts between reporting dealers fell to \$11 trillion at end-December 2013 from \$14 trillion at end-2012 (Table 4). Notional amounts with banks and securities firms also fell, to less than \$2 trillion from \$3 trillion over the same period. Trade compression continued to eliminate redundant contracts, although the volume of compressions has slowed from the peaks of 2008–09.⁸

Central clearing made further inroads in the CDS market in 2013. Central clearing is a key element in global regulators' agenda for reforming OTC derivatives markets to reduce systemic risks. The shift towards central clearing had made significant progress in 2010–11, when the share of outstanding contracts cleared through CCPs had risen from less than 10% to 19% (Graph 3, right-hand panel). However, in 2012 progress stalled, with the share stagnating at 19%. Then in 2013 contracts with CCPs rose to account for 26% of all CDS contracts at year-end. The share of CCPs is highest for multi-name products, at 37%, and much lower for single-name products, at 17% (Table 4). Contracts on CDS indices in the multi-name segment tend to be more standardised than those in the single-name segment, which thus makes the former more amenable to central clearing.

⁷ See D Rime and A Schrimpf, "The anatomy of the global FX market through the lens of the 2013 Triennial Survey", *BIS Quarterly Review*, December 2013, pp 27–43, www.bis.org/publ/qtrpdf/r_qt1312e.htm.

⁸ Compression is a process for tearing up trades, which enables economically redundant derivative trades to be terminated early without changing the net position of each participant. For statistics on multilateral compressions of CDS contracts, see TriOptima, www.trioptima.com/resource-center/statistics/triReduce.html.



Owing in part to the shift towards central clearing, the CDS market has seen an increase in netting. Netting enables market participants to reduce their counterparty exposure by offsetting contracts with negative market values against contracts with positive market values. A comparison of net market values with gross market values indicates the prevalence of legally enforceable bilateral netting agreements. As a result of the increased use of such agreements, net market values as a percentage of gross market values fell to 21% at end-2013 from 24% at end-2012 and 26% at end-2011 (Graph 3, centre panel). The prevalence of netting is greatest for CDS contracts with CCPs and other dealers, where it reduced the ratio of net to gross market values to 9% and 15%, respectively, at end-2013 (Table 4). It is lowest for those with insurance companies (83%) and special purpose vehicles (57%).

The distribution of underlying reference entities indicates that contracts referencing non-financial firms have declined at a somewhat more rapid pace than those referencing other sectors. Outstanding CDS contracts referencing non-financial firms stood at \$7 trillion at end-December 2013, representing 34% of all CDS (Table 7). This is down from 37% at end-2012 and 40% at end-2011 (when this breakdown was first reported). Contracts referencing financial firms stood at \$6 trillion at end-2013, followed by securitised products and multiple sectors at \$5 trillion, and sovereigns at less than \$3 trillion. By rating, contracts referencing investment grade entities equalled \$13 trillion and those referencing lower-rated or unrated entities \$8 trillion (Table 5).

The distribution of outstanding CDS by location of the counterparty showed little change in 2013. The CDS market is very international; CDS with counterparties from the same country in which the dealer is headquartered accounted for only 19% of outstanding contracts at end-2013, or \$4 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 or commodities totalled \$9 trillion at end-December 2013, and the gross market value \$1 trillion (Table 1). Activity in equity-linked contracts declined precipitously in 2008–09 but has since fluctuated around levels similar to the notional amount reported at end-December 2013, \$6.6 trillion.

By contrast, activity in commodity contracts continues to decline. Dealers expanded their commodity derivatives business rapidly between 2004 and 2008 but subsequently scaled back their outstanding positions. The notional amount of outstanding OTC commodity derivatives contracts declined to \$2.2 trillion at end-2013 from \$2.9 trillion at end-2009 and a peak of \$8.5 trillion at end-2007.

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 supply information about 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 which 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" 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.

- 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.⁹
- Insurance firms (including pension funds¹⁰), 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

⁹ 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.

¹⁰ 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, 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

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.....	16
Table 2	Global OTC foreign exchange derivatives market	17
Table 3	Global OTC interest rate derivatives market	18
Table 4	Credit default swaps	19
Table 5	Credit default swap, by rating category.....	20
Table 6	Credit default swaps, by remaining maturity.....	21
Table 7	Credit default swaps, by sector	22
Table 8	Credit default swaps, by location of counterparty.....	23
Table 9	Herfindahl indices	
9a	OTC interest rate derivatives contracts.....	24
9b	OTC foreign exchange derivatives contracts.....	25
9c	OTC equity-linked derivatives contracts.....	26

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 2012	H2 2012	H1 2013	H2 2013	H1 2012	H2 2012	H1 2013	H2 2013
GRAND TOTAL	639,395	632,582	692,924	710,182	25,408	24,733	20,082	18,658
A. Foreign exchange contracts	66,672	67,358	73,121	70,553	2,249	2,313	2,427	2,284
Outright forwards and forex swaps	31,395	31,718	34,421	33,218	773	806	957	824
Currency swaps	24,156	25,420	24,654	25,448	1,190	1,259	1,131	1,186
Options	11,122	10,220	14,046	11,886	286	249	339	273
<i>Memo: Exchange-traded contracts²</i>	328	336	344	384	...	...	...	...
B. Interest rate contracts³	494,427	489,706	561,314	584,364	19,113	18,833	15,081	14,039
FRAs	64,711	71,353	86,334	73,819	51	47	168	108
Swaps	379,401	370,002	425,584	461,281	17,214	17,080	13,588	12,758
Options	50,314	48,351	49,396	49,264	1,848	1,706	1,325	1,174
<i>Memo: Exchange-traded contracts²</i>	55,581	48,546	62,178	57,007	...	...	...	...
C. Equity-linked contracts	6,313	6,251	6,821	6,560	639	600	692	700
Forwards and swaps	1,880	2,045	2,321	2,277	147	157	206	202
Options	4,434	4,207	4,501	4,283	492	443	486	498
<i>Memo: Exchange-traded contracts²</i>	5,601	5,240	6,602	7,237	...	...	...	...
D. Commodity contracts⁴	2,994	2,587	2,458	2,206	379	347	384	264
Gold	523	486	461	341	51	42	80	47
Other	2,471	2,101	1,997	1,865	328	304	304	217
Forwards and swaps	1,659	1,363	1,327	1,261	...	...	...	...
Options	812	739	670	603	...	...	...	...
E. Credit default swaps⁵	26,930	25,068	24,349	21,020	1,187	848	725	653
Single-name instruments	15,566	14,309	13,135	11,324	715	527	430	369
Multi-name instruments	11,364	10,760	11,214	9,696	472	321	295	284
Index products	...	9,656	10,163	8,746	...	...	...	...
F. Unallocated⁶	42,059	41,611	24,861	25,480	1,841	1,792	772	718
GROSS CREDIT EXPOSURE⁷	...	...	...	...	3,691	3,609	3,784	3,033
<i>Memo: Exchange-traded contracts^{2,8}</i>	61,511	54,122	69,124	64,628	...	...	...	...

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 2013. 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

	Notional amounts outstanding				Gross market values			
	H1 2012	H2 2012	H1 2013	H2 2013	H1 2012	H2 2012	H1 2013	H2 2013
Total contracts	66,672	67,358	73,121	70,553	2,249	2,313	2,427	2,284
With reporting dealers	29,484	28,834	30,690	31,206	881	946	992	1,011
With other financial institutions	27,538	28,831	31,757	30,552	885	911	999	887
With non-financial customers	9,651	9,693	10,674	8,794	483	456	437	386
Up to 1 year ³	48,469	48,135	53,677	51,198	...	...	...	...
Between 1 and 5 years ³	12,854	13,728	13,802	13,658	...	...	...	...
Over 5 years ³	5,350	5,495	5,642	5,696	...	...	...	...
US dollar	57,375	57,599	64,483	61,019	1,827	1,870	2,059	1,917
Euro	24,293	23,796	24,366	25,177	882	764	622	707
Yen	13,667	14,113	15,181	14,122	529	827	684	721
Sterling	7,591	7,825	8,435	8,789	213	208	207	256
Swiss franc	4,055	3,832	4,179	4,070	170	155	125	133
Canadian dollar	3,002	3,099	3,280	3,263	89	80	103	74
Swedish krona	1,498	1,453	1,389	1,407	39	41	35	28
Other	21,863	22,999	24,928	23,258	748	681	1,020	731
<i>Memo: Exchange-traded contracts⁴</i>	328	336	344	384	...	...	...	...

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 2012	H2 2012	H1 2013	H2 2013	H1 2012	H2 2012	H1 2013	H2 2013
Total contracts	494,427	489,706	561,314	584,364	19,113	18,833	15,081	14,039
With reporting dealers	139,146	116,892	104,210	96,197	6,568	6,024	4,486	3,742
With other financial institutions	316,905	338,083	421,266	469,611	11,483	11,669	9,732	9,503
With non-financial customers	38,376	34,731	35,838	18,556	1,062	1,141	863	794
Up to 1 year ²	207,236	190,672	219,237	198,302	...	...	...	...
Between 1 and 5 years ²	170,252	180,262	206,887	234,284	...	...	...	...
Over 5 years ²	116,938	118,772	135,190	151,778	...	...	...	...
US dollar	164,024	148,676	169,029	173,792	7,386	5,936	4,734	4,312
Euro	179,076	187,363	227,356	241,067	7,941	9,067	7,258	6,838
Yen	60,092	54,816	55,086	52,873	1,055	911	715	696
Sterling	39,913	42,244	46,334	52,214	1,462	1,616	1,103	1,293
Swiss franc	5,494	5,357	5,583	5,777	161	149	113	121
Canadian dollar	7,380	7,507	9,333	10,372	195	166	146	139
Swedish krona	6,994	6,193	5,906	6,406	94	116	73	77
Other	31,452	37,551	42,687	41,862	819	872	938	563
<i>Memo: Exchange-traded contracts</i> ³	<i>55,581</i>	<i>48,546</i>	<i>62,178</i>	<i>57,007</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 2013			H2 2013			H1 2013	H2 2013	H2 2013
	Bought	Sold	Total	Bought	Sold	Total			
Total contracts	19,257	18,820	24,349	16,223	15,850	21,020	725	653	139
With reporting dealers ²	13,711	13,746	13,728	11,024	11,081	11,053	455	369	56
With other financial institutions	5,424	5,004	10,428	5,083	4,697	9,779	260	276	76
Central counterparties ²	2,776	2,772	5,548	2,773	2,745	5,518	87	123	11
Banks and security firms	1,220	996	2,216	956	768	1,724	66	53	15
Insurance firms	165	66	230	152	57	209	9	7	6
SPVs, SPCs and SPEs	292	80	372	271	92	363	21	16	9
Hedge funds	443	633	1,076	423	611	1,034	42	44	16
Other financial customers	529	457	986	507	425	931	35	33	20
With non-financial customers	122	70	193	116	72	188	10	9	6
Single-name credit default swaps	10,886	10,808	13,135	9,292	9,248	11,324	430	369	...
With reporting dealers	8,564	8,553	8,559	7,197	7,234	7,215	292	249	...
With other financial institutions	2,279	2,219	4,498	2,031	1,979	4,010	134	116	...
Central counterparties ²	1,024	1,023	2,047	986	978	1,964	38	35	...
Banks and security firms	745	618	1,363	573	462	1,035	42	33	...
Insurance firms	54	31	84	49	28	78	5	4	...
SPVs, SPCs and SPEs	67	31	98	57	27	84	10	7	...
Hedge funds	141	302	443	150	297	448	19	21	...
Other financial customers	249	214	463	215	187	402	19	16	...
With non-financial customers	43	36	78	64	34	99	4	4	...
Multi-name credit default swaps	8,371	8,013	11,214	6,931	6,602	9,696	295	284	...
With reporting dealers	5,146	5,193	5,170	3,828	3,847	3,837	164	120	...
With other financial institutions	3,145	2,785	5,930	3,052	2,718	5,769	126	160	...
Central counterparties ²	1,752	1,749	3,501	1,787	1,767	3,554	49	88	...
Banks and security firms	474	378	853	384	306	689	24	21	...
Insurance firms	111	35	146	102	29	132	4	3	...
SPVs, SPCs and SPEs	225	49	274	214	65	279	11	9	...
Hedge funds	302	331	633	273	313	586	23	23	...
Other financial customers	280	243	523	291	238	529	16	17	...
With non-financial customers	80	35	114	52	37	89	5	4	...
of which: index products	7,540	7,424	10,163	6,188	6,073	8,746	...	...	...
With reporting dealers	4,794	4,806	4,800	3,521	3,509	3,515	...	...	...
With other financial institutions	2,699	2,596	5,295	2,647	2,544	5,191	...	...	...
Central counterparties ²	1,749	1,747	3,495	1,781	1,754	3,535	...	...	...
Banks and security firms	369	325	694	300	261	561	...	...	...
Insurance firms	51	27	78	46	24	70	...	...	...
SPVs, SPCs and SPEs	69	33	102	77	59	136	...	...	...
Hedge funds	292	325	617	263	307	570	...	...	...
Other financial customers	168	139	308	179	138	318	...	...	...
With non-financial customers	47	22	68	21	20	41	...	...	...

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 2012	H1 2013	H2 2013	H2 2012	H1 2013	H2 2013	H2 2012	H1 2013	H2 2013	H2 2012	H1 2013	H2 2013
Total contracts	25,068	24,349	21,020	15,102	15,229	13,205	5,147	4,387	4,867	4,819	4,734	2,948
With reporting dealers	14,149	13,728	11,053	8,303	8,270	7,007	3,018	2,723	2,486	2,828	2,735	1,559
With other financial institutions	10,719	10,428	9,779	6,693	6,831	6,111	2,098	1,625	2,312	1,929	1,972	1,356
Central counterparties ³	4,891	5,548	5,518	3,464	4,013	3,610	848	715	1,364	578	821	544
Banks and security firms	2,963	2,216	1,724	1,746	1,364	1,087	758	450	452	459	402	185
Insurance firms	258	230	209	113	117	102	61	37	44	84	76	63
SPVs, SPCs and SPEs	587	372	363	289	174	191	52	44	42	246	155	129
Hedge funds	957	1,076	1,034	553	685	699	199	222	209	204	169	125
Other financial customers	1,063	986	931	527	479	421	179	157	201	357	350	309
With non-financial customers	200	193	188	106	127	87	32	38	69	63	27	32
Single-name credit default swaps	14,309	13,135	11,324	9,712	9,150	8,369	2,830	2,490	2,350	1,767	1,495	605
With reporting dealers	9,031	8,559	7,215	5,846	5,669	5,071	2,087	1,899	1,750	1,098	990	394
With other financial institutions	5,170	4,498	4,010	3,806	3,421	3,231	732	580	578	632	498	201
Central counterparties ³	2,078	2,047	1,964	1,728	1,735	1,745	155	141	173	195	172	47
Banks and security firms	1,778	1,363	1,035	1,223	959	796	337	223	188	218	181	50
Insurance firms	114	84	78	63	55	52	23	14	17	28	16	8
SPVs, SPCs and SPEs	225	98	84	158	60	57	36	21	17	31	17	10
Hedge funds	464	443	448	282	294	297	104	104	113	78	45	38
Other financial customers	511	463	402	352	319	284	77	78	70	82	66	48
With non-financial customers	108	78	99	59	60	66	11	11	22	37	7	10
Multi-name credit default swaps	10,760	11,214	9,696	5,390	6,078	4,837	2,317	1,897	2,516	3,052	3,239	2,343
With reporting dealers	5,118	5,170	3,837	2,457	2,601	1,936	931	825	736	1,730	1,744	1,165
With other financial institutions	5,549	5,930	5,769	2,886	3,410	2,880	1,366	1,045	1,734	1,297	1,475	1,155
Central counterparties ³	2,813	3,501	3,554	1,736	2,278	1,866	693	574	1,191	383	649	497
Banks and security firms	1,185	853	689	523	404	291	421	228	264	241	221	135
Insurance firms	144	146	132	50	63	50	38	23	27	56	60	55
SPVs, SPCs and SPEs	362	274	279	131	114	135	16	23	25	215	138	120
Hedge funds	493	633	586	271	391	402	95	118	97	126	123	88
Other financial customers	552	523	529	176	160	137	102	80	131	275	283	261
With non-financial customers	93	114	89	46	67	21	21	27	46	25	20	22

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 2012	H1 2013	H2 2013	H2 2012	H1 2013	H2 2013	H2 2012	H1 2013	H2 2013	H2 2012	H1 2013	H2 2013
Total contracts	25,068	24,349	21,020	5,078	4,316	3,655	18,055	18,360	16,162	1,935	1,674	1,203
With reporting dealers	14,149	13,728	11,053	3,173	2,718	2,202	9,963	10,106	8,297	1,013	905	554
With other financial institutions	10,719	10,428	9,779	1,879	1,568	1,438	7,952	8,138	7,728	888	722	614
Central counterparties ²	4,891	5,548	5,518	761	744	777	3,827	4,588	4,517	302	215	224
Banks and security firms	2,963	2,216	1,724	692	497	366	2,060	1,604	1,264	210	115	94
Insurance firms	258	230	209	33	27	27	171	162	147	54	41	35
SPVs, SPCs and SPEs	587	372	363	88	50	41	429	289	292	70	33	29
Hedge funds	957	1,076	1,034	155	155	120	686	800	798	116	121	116
Other financial customers	1,063	986	931	150	95	106	778	695	709	136	196	116
With non-financial customers	200	193	188	25	30	15	141	116	138	34	47	35
Single-name credit default swaps	14,309	13,135	11,324	3,519	3,158	2,565	9,725	8,817	8,059	1,065	1,160	700
With reporting dealers	9,031	8,559	7,215	2,312	2,114	1,692	6,106	5,749	5,161	613	695	362
With other financial institutions	5,170	4,498	4,010	1,188	1,036	862	3,546	3,022	2,827	437	440	321
Central counterparties ²	2,078	2,047	1,964	470	496	437	1,469	1,438	1,429	139	113	98
Banks and security firms	1,778	1,363	1,035	487	393	279	1,177	890	688	114	80	67
Insurance firms	114	84	78	18	14	12	73	51	48	23	19	17
SPVs, SPCs and SPEs	225	98	84	43	17	10	149	64	60	33	17	14
Hedge funds	464	443	448	81	49	46	327	325	340	56	69	62
Other financial customers	511	463	402	88	67	78	351	253	261	71	143	63
With non-financial customers	108	78	99	19	8	10	73	46	71	16	25	17
Multi-name credit default swaps	10,760	11,214	9,696	1,559	1,157	1,090	8,330	9,543	8,104	870	513	502
With reporting dealers	5,118	5,170	3,837	861	604	509	3,856	4,357	3,136	401	209	192
With other financial institutions	5,549	5,930	5,769	692	532	576	4,406	5,116	4,901	451	282	292
Central counterparties ²	2,813	3,501	3,554	291	248	340	2,358	3,150	3,089	163	103	125
Banks and security firms	1,185	853	689	205	104	87	884	713	576	96	36	27
Insurance firms	144	146	132	15	14	15	98	110	99	31	22	18
SPVs, SPCs and SPEs	362	274	279	44	33	32	281	225	232	37	16	15
Hedge funds	493	633	586	74	106	74	359	475	459	60	52	54
Other financial customers	552	523	529	62	28	28	427	442	448	64	53	53
With non-financial customers	93	114	89	6	22	5	68	70	67	18	22	18

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 2013	H2 2013	H1 2013	H2 2013	H1 2013	H2 2013	H1 2013	H2 2013	H1 2013	H2 2013	H1 2013	H2 2013
Total contracts	24,349	21,020	3,243	2,633	6,404	5,709	8,360	7,230	732	566	5,606	4,879
With reporting dealers	13,728	11,053	2,430	1,929	3,340	2,734	4,916	4,067	509	372	2,532	1,950
With other financial institutions	10,428	9,779	791	683	3,041	2,934	3,401	3,118	210	181	2,983	2,861
Central counterparties ³	5,548	5,518	133	147	1,629	1,705	2,002	1,969	7	8	1,777	1,689
Banks and security firms	2,216	1,724	393	276	565	477	736	546	90	76	431	350
Insurance firms	230	209	16	15	47	41	57	46	31	22	79	85
SPVs, SPCs and SPEs	372	363	22	27	80	71	79	56	15	11	176	198
Hedge funds	1,076	1,034	118	111	462	427	304	309	36	34	157	154
Other financial customers	986	931	110	107	258	214	222	192	30	30	363	386
With non-financial customers	193	188	22	22	24	41	43	45	13	12	91	68
Single-name credit default swaps	13,135	11,324	3,098	2,514	3,202	2,859	6,836	5,950	0	0	0	0
With reporting dealers	8,559	7,215	2,325	1,850	2,174	1,916	4,060	3,450	0	0	0	0
With other financial institutions	4,498	4,010	752	644	1,006	903	2,740	2,463	0	0	0	0
Central counterparties ³	2,047	1,964	128	145	316	305	1,603	1,514	0	0	0	0
Banks and security firms	1,363	1,035	374	259	350	290	639	486	0	0	0	0
Insurance firms	84	78	15	14	29	31	40	33	0	0	0	0
SPVs, SPCs and SPEs	98	84	10	10	31	27	58	47	0	0	0	0
Hedge funds	443	448	116	110	98	105	229	233	0	0	0	0
Other financial customers	463	402	109	106	182	145	172	151	0	0	0	0
With non-financial customers	78	99	21	21	21	40	36	37	0	0	0	0
Multi-name credit default swaps	11,214	9,696	145	119	3,203	2,850	1,524	1,279	732	566	5,606	4,879
With reporting dealers	5,170	3,837	105	79	1,165	818	856	617	509	372	2,532	1,950
With other financial institutions	5,930	5,769	39	39	2,035	2,031	661	655	210	181	2,983	2,861
Central counterparties ³	3,501	3,554	4	2	1,312	1,399	400	456	7	8	1,777	1,689
Banks and security firms	853	689	19	17	215	187	97	60	90	76	431	350
Insurance firms	146	132	1	1	18	11	17	13	31	22	79	85
SPVs, SPCs and SPEs	274	279	12	17	49	44	22	9	15	11	176	198
Hedge funds	633	586	1	1	364	322	75	76	36	34	157	154
Other financial customers	523	529	2	2	76	68	50	41	30	30	363	386
With non-financial customers	114	89	1	1	3	1	7	7	13	12	91	68

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 2012	H1 2013	H2 2013	H2 2012	H1 2013	H2 2013	H2 2012	H1 2013	H2 2013
All locations	25,068	24,349	21,020	14,149	13,728	11,053	10,920	10,621	9,967
Home country ²	6,106	4,744	4,091	1,625	2,549	1,932	4,481	2,195	2,159
Abroad	18,963	19,606	16,929	12,524	11,180	9,121	6,438	8,426	7,808
US	...	5,132	4,486	...	2,484	2,147	...	2,648	2,339
Japan	...	196	162	...	139	110	...	57	51
European developed countries	...	13,011	10,871	...	8,480	6,800	...	4,531	4,071
Latin America	...	600	780	...	7	3	...	594	777
Other Asian countries	...	187	170	...	9	7	...	178	162
All other countries	...	479	461	...	61	53	...	419	408

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 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	1,160	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	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	1,606	1,013	656	554	632	923	908	917	1,204	554	816	873	872	1,832	1,069	754	782
Jun 2013	1,023	777	2,040	1,795	1,527	1,005	661	545	646	979	880	940	1,116	550	770	843	885	3,042	924	693	767
Dec 2013	1,029	811	2,660	1,856	1,511	1,042	720	545	664	1,206	856	898	1,490	566	762	931	1,003	1,978	897	668	773

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

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	714	1,083	787	1,211	4,387	3,769	1,129	1,038	784	953
Jun 2013	785	938	915	1,404	4,606	3,495	1,162	1,078	734	940
Dec 2013	720	1,047	1,230	1,514	4,595	4,478	1,012	1,170	808	928