



BANK FOR INTERNATIONAL SETTLEMENTS



Statistical release

OTC derivatives statistics at end-June 2013

Monetary and Economic Department

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Notations

billion	thousand million
trillion	thousand billion
trn	trillion
e	estimated
lhs	left-hand scale
rhs	right-hand scale
\$	US dollar unless specified otherwise
...	not available
.	not applicable
–	nil or negligible

Differences in totals are due to rounding.

The term “country” as used in this publication also covers territorial entities that are not states as understood by international law and practice but for which data are separately and independently maintained.

Abbreviations

AR	Argentina	RO	Romania
AT	Austria	RU	Russia
BG	Bulgaria	SA	Saudi Arabia
BH	Bahrain	SG	Singapore
BR	Brazil	TH	Thailand
CL	Chile	TR	Turkey
CN	China	TW	Chinese Taipei
CO	Colombia	ZA	South Africa
DK	Denmark		
FI	Finland		
GR	Greece	CAD	Canadian dollar
HK	Hong Kong SAR	CHF	Swiss franc
HU	Hungary	EUR	euro
ID	Indonesia	GBP	pound sterling
IE	Ireland	JPY	yen
IL	Israel	SEK	Swedish krona
IN	India	USD	US dollar
KR	Korea		
LV	Latvia		
MX	Mexico	CCP	central counterparty
MY	Malaysia	CDS	credit default swap
NO	Norway	FRA	forward rate agreement
PE	Peru	OTC	over-the-counter
PH	Philippines		
PL	Poland		
PT	Portugal		

1. BIS surveys of OTC derivatives markets

This publication presents the combined results of two BIS surveys on *amounts outstanding* in OTC derivatives markets: the semiannual survey of derivatives dealers in 13 jurisdictions, and the Triennial Central Bank Survey of dealers in an additional 34 jurisdictions. The latest surveys took place at end-June 2013. The results for a companion BIS survey of *turnover* in foreign exchange and OTC derivatives markets were published in September 2013.

The December 2013 *BIS Quarterly Review* will include articles that analyse the results of the latest surveys. OTC derivatives statistics at end-December 2013 will be released no later than 15 May 2014.

Highlights of the June 2013 survey

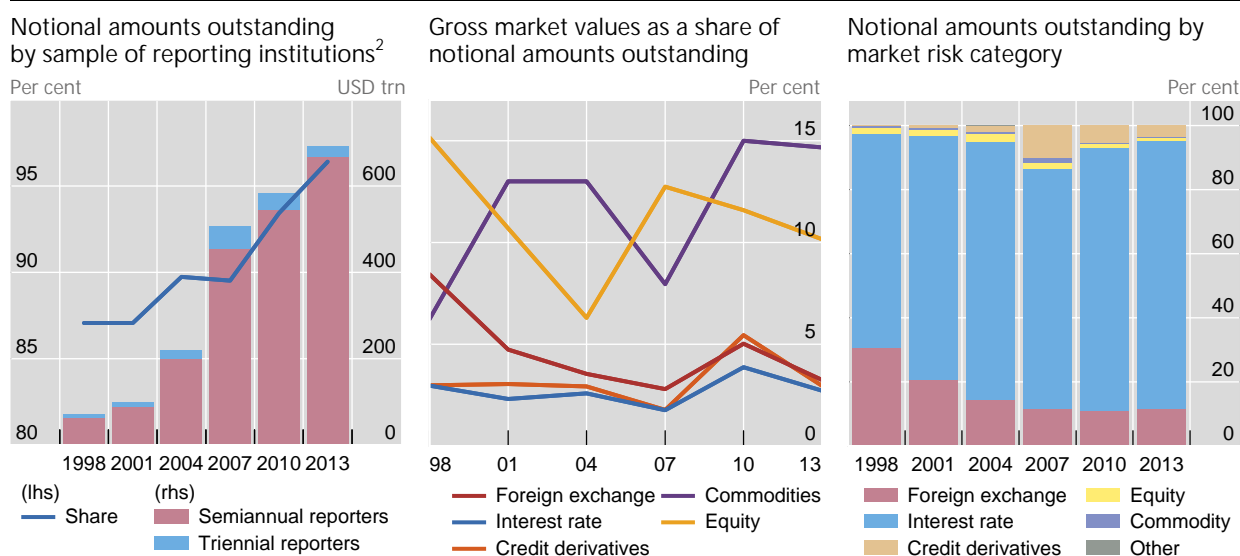
The latest BIS statistics on OTC derivatives markets show that notional amounts outstanding totalled \$693 trillion at end-June 2013. Of this total, \$668 trillion was reported by dealers in the 13 countries that participate in the BIS's semiannual survey, and \$25 trillion by dealers in the 34 countries that participate only in the Triennial Survey (Graph 1, left-hand panel).

Notional amounts increased substantially in the first half of 2013, up from \$633 trillion at end-2012. The increase was driven in part by a further shift towards clearing through CCPs. When contracts are cleared through CCPs, notional amounts reported for the BIS's surveys increase because one contract becomes two.

In contrast to notional amounts, the gross market value of OTC derivatives – that is, the cost of replacing all outstanding contracts at current market prices – declined between end-2012 and end-June 2013, from \$25 trillion to \$20 trillion. Gross credit exposures – gross market values after legally enforceable bilateral netting but before collateral – stood at \$3.9 trillion at end-June 2013.

Global OTC derivatives market¹

Graph 1



¹ Adjusted for inter-dealer double-counting. ² Share refers to the percentage of semiannual reporters in the global total.

Source: BIS Triennial Central Bank Survey.

Interest rate contracts are the largest segment in the global OTC derivatives market, with notional amounts totalling \$577 trillion at end-June 2013. However, the global figures mask diversity among reporting dealers. The Triennial Survey indicates that derivatives activity by dealers based in emerging markets tends to focus on the management of foreign exchange risk. Interest rate derivatives account for a much smaller share of contracts reported by these dealers than those based in the largest derivatives markets (ie than those headquartered in the 13 countries that participate in the semiannual survey).

In addition, dealers based in emerging markets reported little in the way of credit default swaps (CDS); dealers participating in the semiannual survey accounted for almost the entirety of outstanding CDS contracts. CDS data for end-June 2013 include a regional breakdown of foreign counterparties for the first time. Counterparties based in the home country of the dealer accounted for 19% of notional CDS outstanding. Contracts with foreign counterparties headquartered in Europe accounted for another 53%, and with those headquartered in the United States 21%. Business with Latin American counterparties accounted for about 2%, which was larger than that with Asian counterparties.

Relationship of the Triennial Survey to the semiannual survey

The structure of the amounts outstanding part of the Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity is the same as that of the semiannual survey of positions in OTC derivatives markets. Both surveys cover the notional amounts outstanding and gross market values of foreign exchange, interest rate, equity, commodity and credit derivatives traded in OTC markets. Furthermore, both cover the worldwide *consolidated* positions of reporting dealers – in contrast to the turnover data collected for the Triennial Central Bank Survey, which are collected from sales desks on an unconsolidated basis.

The semiannual survey captures the positions of about 70 major derivatives dealers based in 13 countries. The Triennial Survey adds many more dealers and countries, so that the two surveys combined capture more than 400 dealers in 47 countries (see Section 3). Both surveys are coordinated by the BIS under the auspices of the Committee on the Global Financial System. Central banks and other authorities collect data from the dealers headquartered in their jurisdiction and report national aggregates to the BIS, which then calculates global aggregates. Owing to the small number of dealers in some countries, the BIS does not publish any national aggregates, only global totals.

Compared with the semiannual survey, the Triennial Survey provides additional information in three areas. First, it provides information about the size and structure of many smaller OTC derivatives markets. The semiannual survey captures the bulk of amounts outstanding in OTC markets worldwide; however, it is not necessarily representative of positions in smaller markets. The Triennial Survey collects comparable data for a wide diversity of dealers, including dealers active in smaller markets who may not be active in the major derivatives markets.

Second, the Triennial Survey serves as a benchmark for the semiannual survey. The share of global OTC derivatives activity captured by the semiannual survey increased from 93% at end-June 2010 to 96% at end-June 2013, owing mainly to the addition of dealers in Australia and Spain to the semiannual survey (Graph 1, left-hand panel).¹ The market share of semiannual reporters 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%).

¹ Between Triennial Surveys, the results of the semiannual surveys are adjusted upwards to adjust for activity not captured in the semiannual survey. This adjustment is made only for the grand total and is shown as an “unallocated” category in Table 1 in Section 4.

Finally, the Triennial Survey captures some OTC instruments not covered by the semiannual survey, in particular credit derivatives other than CDS. That said, the semiannual survey provides much more detailed information about CDS than the Triennial Survey. For the 2013 Triennial Survey, a more detailed breakdown of CDS counterparties was requested for “other financial institutions”, but other CDS details available in the semiannual survey, such as rating and sector of the underlying reference entity, were not requested.

The results of the combined semiannual and Triennial surveys are summarised in Table A below. Additional details are available on the BIS website, at www.bis.org/publ/rpfx13.htm. The results of the semiannual survey are summarised in Tables 1–9 in Section 4. Additional details are available on the BIS website, at www.bis.org/statistics/derdetailed.htm.

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

	Notional amounts outstanding			Gross market value		
	end-June 2007	end-June 2010	end-June 2013	end-June 2007	end-June 2010	end-June 2013
GRAND TOTAL	507,907	582,655	692,908	11,118	24,673	20,158
A. Foreign exchange contracts	57,604	62,933	81,025	1,613	3,158	2,613
Forwards and swaps	29,775	31,935	39,575	668	1,330	1,082
Currency swaps	14,130	18,890	26,318	666	1,372	1,170
Total options	13,662	12,107	15,077	279	456	362
Other	37	1	56	...	...	...
B. Interest rate contracts²	381,357	478,093	577,269	6,730	18,508	15,683
Forward rate agreements	25,607	60,028	89,434	145	204	276
Interest rate swaps	299,155	367,541	437,066	5,818	16,703	14,054
Total options	56,587	50,519	50,191	767	1,600	1,352
Other	7	5	579	...	...	...
C. Equity-linked contracts	9,518	6,868	6,963	1,212	796	707
Forwards and swaps	2,668	1,854	2,350	262	202	209
Total options	6,850	5,013	4,614	950	595	498
D. Commodity contracts³	8,255	3,273	2,727	656	492	394
Gold	1,051	669	610	56	52	83
Other	7,204	2,604	2,117	600	439	312
Forwards and swaps	3,481	1,686	1,403	...	...	...
Options	3,724	918	715	...	...	...
E. Credit derivatives	51,095	31,416	24,845	906	1,708	732
Forwards and swaps	49,974	31,331	24,497	...	...	...
CDS	45,179	31,057	24,470	768	1,694	728
Single-name instruments	25,104	18,806	13,211	430	1,012	432
Multi-name instruments	20,075	12,251	11,259	338	682	296
Index products	0	7,614	10,170	...	...	...
Options	1,121	85	348	...	...	...
F. Other derivatives	78	72	78	1	12	29
Forwards and swaps	73	38	63	...	...	...
Options	6	34	15	...	...	...
GROSS CREDIT EXPOSURE⁴	...	...	...	2,672	3,578	3,900
<i>Memo: Exchange-traded contracts⁵</i>	<i>95,097</i>	<i>75,418</i>	<i>66,311</i>	<i>...</i>	<i>...</i>	<i>...</i>

¹ All figures are adjusted for double-counting. Notional amounts outstanding have been adjusted by halving positions vis-à-vis other reporting dealers. Gross market values have been calculated as the sum of the total gross positive market value of contracts and the absolute value of the gross negative market value of contracts with nonreporting counterparties.

² Single currency contracts only. ³ Adjustments for double-counting partly estimated. ⁴ Gross market values after taking into account legally enforceable bilateral netting agreements. ⁵ Sources: FOW TRADEDATA; Futures Industry Association; various futures and options exchanges.

2. Global OTC derivatives market at end-June 2013

OTC derivatives notional amounts outstanding totalled \$693 trillion at end-June 2013 (Table A). Of this total, \$668 trillion was reported by dealers that participate in the semiannual survey, and \$25 trillion by those that participate only in the Triennial Survey (Graph 1, left-hand panel).

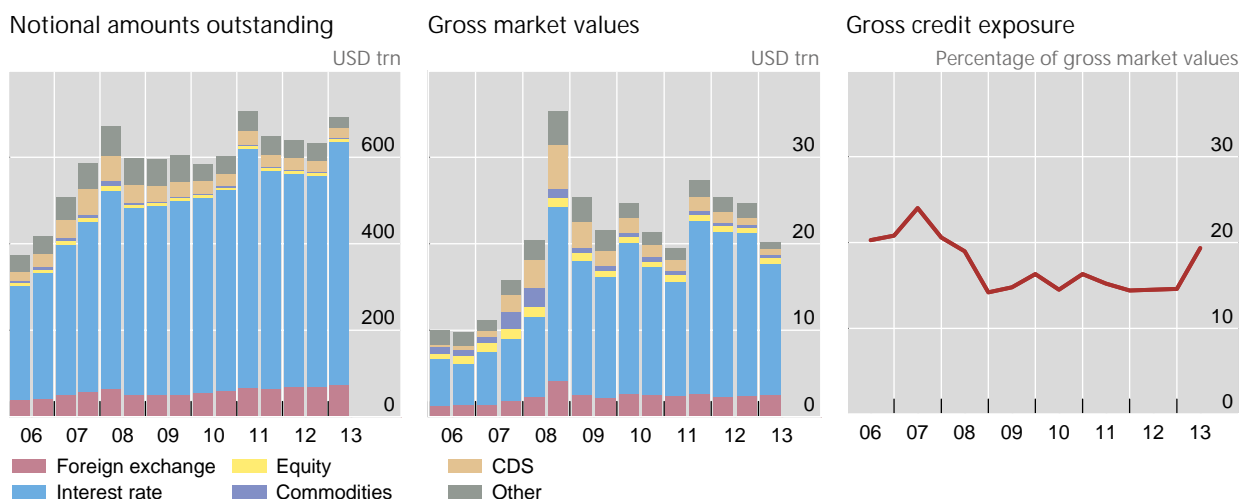
The gross market value of all contracts – that is, the cost of replacing all outstanding contracts at current market prices – stood at \$20 trillion at end-June 2013. Of this amount, semiannual survey participants reported more than \$19 trillion, and Triennial reporters contributed less than \$1 trillion. The semiannual survey indicates that gross market values declined between end-2012 and mid-2013 (Graph 2, centre panel). This decline is attributable in part to exchange rate movements that lowered the dollar value of yen-denominated contracts.²

Gross credit exposures – gross market values after legally enforceable bilateral netting but before collateral – are collected only in the semiannual survey. They jumped by 8% between end-December 2012 and end-June 2013 to \$3.9 trillion. Relative to gross market values, exposures rose from 15% to 19%, which was the highest percentage reached since end-2007 (Graph 2, right-hand panel).

Semiannual survey of OTC derivatives positions

By data type and market risk category

Graph 2



Source: BIS semiannual OTC derivatives statistics. See also Table 1 in Section 4.

Interest rate derivatives

Notional amounts for single-currency interest rate derivatives, the largest segment of the OTC derivatives market, dominate the global aggregates because of the importance of these derivatives in managing interest rate risks on private and public debt in semiannual reporting countries. Global OTC derivatives notional amounts outstanding related to interest rates totalled \$577 trillion at end-June 2013 (Table A). Of this, \$561 trillion was reported by semiannual reporting centres alone (Graph 2, left-hand panel), and \$16 trillion by Triennial reporters.

² Between end-December 2012 and end-June 2013, the US dollar appreciated by 13% against the yen.

The distribution of aggregate amounts outstanding and market values among instruments (swaps, forward rate agreements (FRAs) and options) is very similar for both reporting samples, with the exception of FRAs, where almost 40% of the outstanding aggregate market value was accounted for by the 3% notional amounts reported by the Triennial reporters alone.

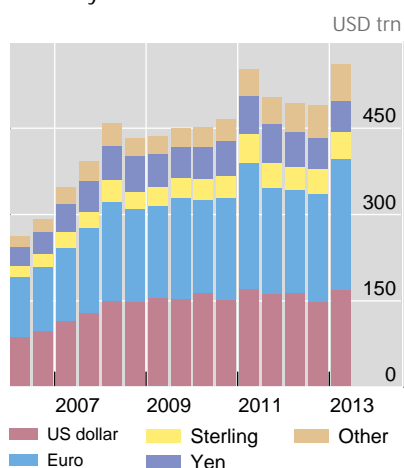
Amounts outstanding for single-currency interest rate derivatives reported by the semiannual reporting sample grew 15% in the first half of 2013 to stand at \$561 trillion at end-June 2013 (Graph 3, left-hand panel). The increase was driven by strong growth (21%) in FRAs to \$86 trillion. Notional amounts outstanding in interest rate swaps increased by 15% to \$426 trillion, after having declined 2% in the second half of 2012. Interest rate options were little changed.

Contracts between reporting dealers fell 11% between end-2012 and end-June 2013 (after 16% in the second half of 2012) to \$104 trillion, while those with other financial institutions increased 25% to \$421 trillion. When contracts are cleared through central counterparties (CCPs), contract volumes reported to the BIS increase because one contract becomes two (Graph 3, right-hand panel).³ Due to the impact of central clearing, as well as a substantial expansion of the reporting coverage in one country, FRA market values outstanding jumped from \$47 billion at end-2012 to \$168 billion at mid-2013.

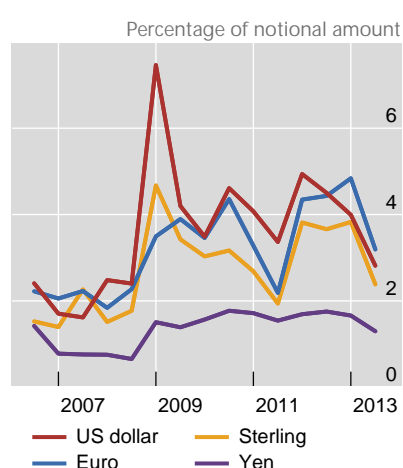
OTC interest rate derivatives

Graph 3

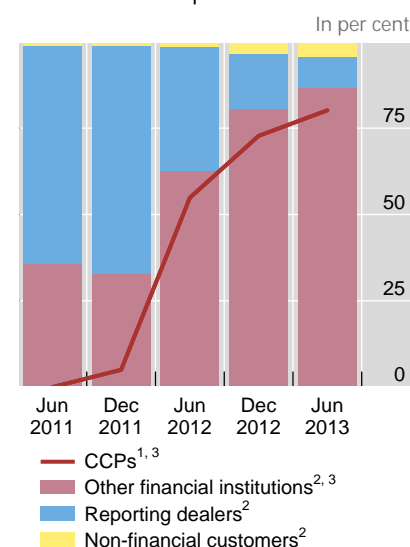
Notional amounts outstanding, by currency



Gross market values, by currency



Forward rate agreements; share with selected counterparties



¹ Share of notional amounts reported to the Global Trade Repository that are with central counterparties (CCPs). ² Share of notional amounts reported to the BIS. ³ Not adjusted for the doubling of contract volumes when bilateral positions are moved to CCPs.

Source: BIS semiannual OTC derivatives statistics; DTCC; TriOptima. See also Table 3 in Section 4.

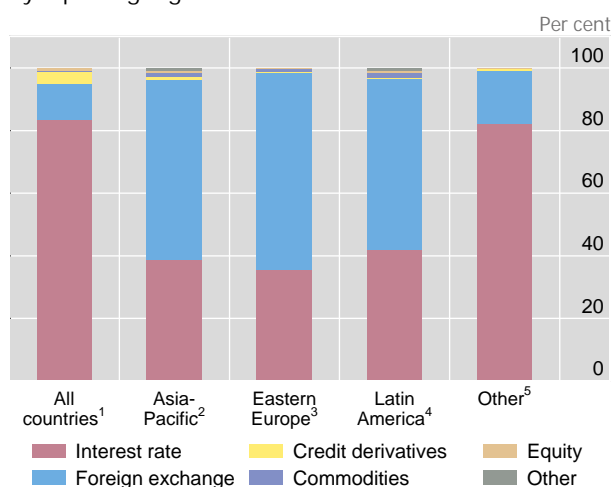
³ A CCP is an entity that interposes itself between counterparties to contracts traded in one or more financial markets, becoming the buyer to every seller and the seller to every buyer. When a derivatives contract between two reporting dealers is cleared by a CCP, this contract is replaced, in an operation called novation, by two new contracts: one between counterparty A and the CCP, and a second between the CCP and counterparty B. As the BIS data record all outstanding positions, they would capture both the contracts in this example. This measure of the market size, ie a measure that captures all outstanding contracts, may be appropriate for gauging counterparty risk, given that any outstanding contract could potentially be defaulted on. However, this approach overstates the size of the derivatives market if used to proxy other aspects, such as the transfer of underlying risks, for which a single counting of the centrally cleared contracts would be more appropriate.

Notional amounts outstanding by market risk category

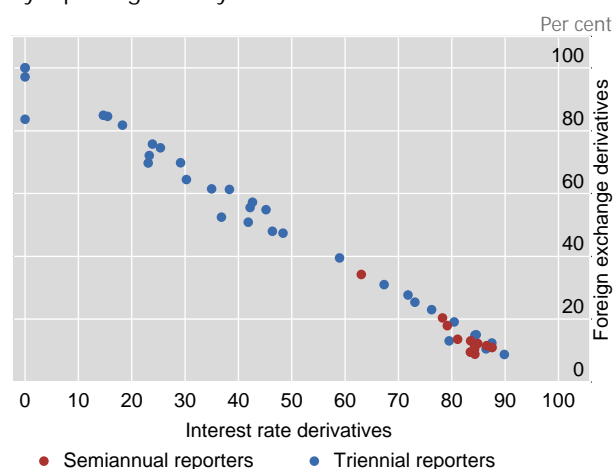
Share of total outstanding, at end-June 2013

Graph 4

By reporting region



By reporting country



¹ 13 countries participating in the semiannual survey plus 34 additional countries from the Triennial Survey (listed in footnotes 2 to 5). ² CN, HK, ID, IN, KR, MY, PH, SG, TH, TW. ³ BG, HU, LV, PL, RO, RU, TR. ⁴ AR, BR, CL, CO, MX, PE. ⁵ AT, BH, DK, FI, GR, IE, IL, NO, PT, SA, ZA.

Source: BIS Triennial Central Bank Survey.

Although the OTC derivatives data are not published by reporting jurisdiction, it is possible to gain an appreciation of the very different risk structures that are managed by dealers in different countries. Predominance of interest rate risk management is a characteristic of the dealers that participate in the semiannual survey, which dominate the global figures and are all based in advanced economies. In contrast, derivatives linked to foreign exchange are of much greater relative importance among reporting institutions based in the emerging economies of Asia, central and eastern Europe, and Latin America, where they account for almost 60% of notional amounts outstanding (Graph 4, left-hand panel).

The data for dealers in individual reporting countries reveal that there is great diversity in the share of interest rate-related derivatives among those dealers that contribute to the Triennial Survey (Graph 4, right-hand panel). In contrast, among the group of dealers that participate in the semiannual survey, interest rate derivatives account for 80–90% of their total notional amounts outstanding.

The role of currencies in derivatives related to interest rate management is quite diversified in the two reporting sets. While interest rate derivatives linked to the US dollar and the euro dominate in advanced economies, reflecting their role as domestic currency for many semiannually reporting economies, the importance of derivatives linked to “other” (largely domestic) currencies in the other regions is evident (Graph 5, left-hand panel).

Foreign exchange derivatives

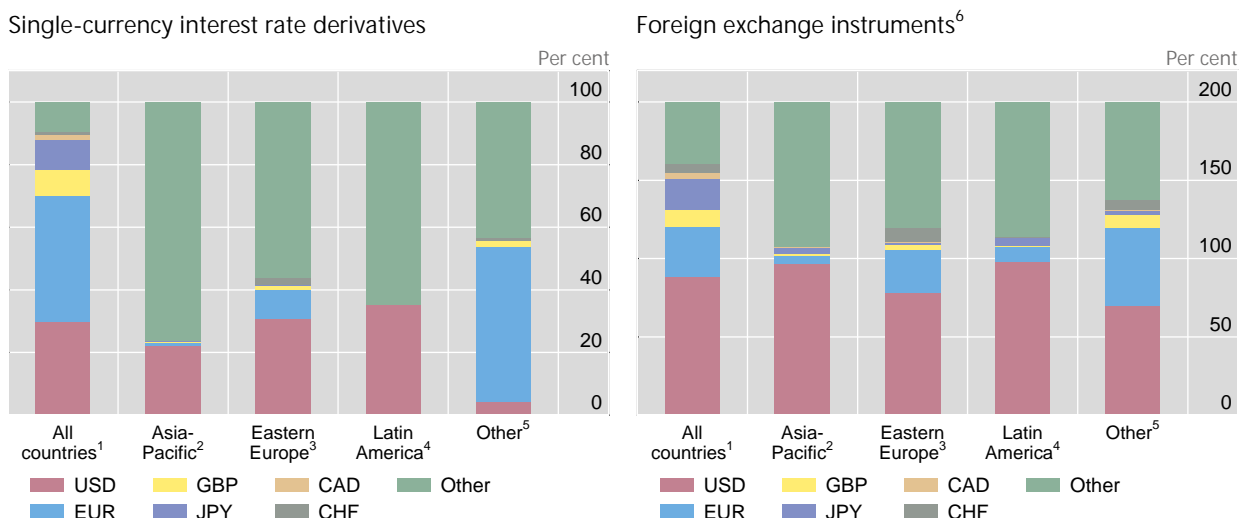
Global OTC derivatives notional amounts outstanding related to foreign exchange contracts totalled \$81 trillion at end-June 2013 (Table A). Of this, \$73 trillion was reported by semiannual reporting centres, and \$8 trillion by Triennial reporters.

Regional differences are also evident relating to currency risk management in the foreign exchange-related markets. Notional amounts of instruments involving the US dollar on one side accounted for roughly 88% of foreign exchange-related derivatives in all regions at end-June 2013. In

Notional amounts outstanding by currency

Share of total outstanding, at end-June 2013

Graph 5



¹ 13 countries participating in the semiannual survey plus 34 additional countries from the Triennial Survey (listed in footnotes 2 to 5). ² CN, HK, ID, IN, KR, MY, PH, SG, TH, TW. ³ BG, HU, LV, PL, RO, RU, TR. ⁴ AR, BR, CL, CO, MX, PE. ⁵ AT, BH, DK, FI, GR, IE, IL, NO, PT, SA, ZA. ⁶ Because two currencies are involved in each outstanding contract, the sum of the percentage shares of individual currencies totals 200%.

Source: BIS Triennial Central Bank Survey.

contrast, the share of the euro varied between almost 32% in all reporting economies and 5% in emerging economies in Asia. The share of instruments linked to “other” currencies not comprehensively identified (but presumably mostly domestic currencies) accounted for around 80–90% of amounts outstanding in emerging economies (Graph 5, right-hand panel).

In the semiannual reporting sample, the market value of contracts referencing the US dollar on one side (accounting for 85% of all foreign exchange derivatives) rose on average by 10% between end-2012 and end-June 2013, while average market values of contracts referencing the euro, the yen and the Swiss franc on one side dropped by almost 20%, compared with end-2012. Market values linked to the yen were still unusually elevated at end-June 2013 despite the decline (which was partly due to the 13% depreciation of the yen against the US dollar), because market values had increased by 56% during the previous half-year, mainly due to the revaluation of outstanding forwards and swaps.

Equity-linked and commodity derivatives

Global OTC derivatives notional amounts outstanding linked to equity totalled \$7 trillion at end-June 2013 (Table A). Practically all of this amount was reported by semiannual reporting centres alone. In the semiannually reporting sample, equity-related market values rebounded by 15% between end-2012 and end-June 2013 to \$693 billion, after having declined by a cumulative 15% since June 2011, when market values for equity-linked instruments had stood at \$708 billion.

Turning to derivatives related to developments in commodity markets, notional amounts outstanding totalled almost \$3 trillion at end-June 2013 (Table A). Only 90% of amounts outstanding were reported by semiannual reporting centres. Triennial reporters contributed the remaining \$270 billion. This strong contribution reflects the particular importance of commodity risk management in triennially reporting jurisdictions. Contracts related to gold (\$149 billion) accounted for 55% of the commodity notional amounts outstanding in the Triennial sample, compared with 19% for semiannual reporters.

Credit default swaps

Credit default swaps are mostly concentrated in the semiannual reporting group, which accounted for \$24.3 trillion of the total \$24.5 trillion outstanding at end-June 2013 (Table A). In the semiannual group, outstanding contract volumes in the single-name CDS market continued to decline, by about 8% between end-2012 and end-June 2013 (Graph 6, left-hand panel). In contrast, contracts referencing multiple names picked up for the first time since end-June 2011, increasing by 4% to \$11 billion. Of these, index products grew slightly faster, at 5%. Outstanding credit protection on sovereigns grew by 10% compared with end-2012. In contrast, protection outstanding on securitised products relating to mortgage- and other asset-backed securities fell by 21%.

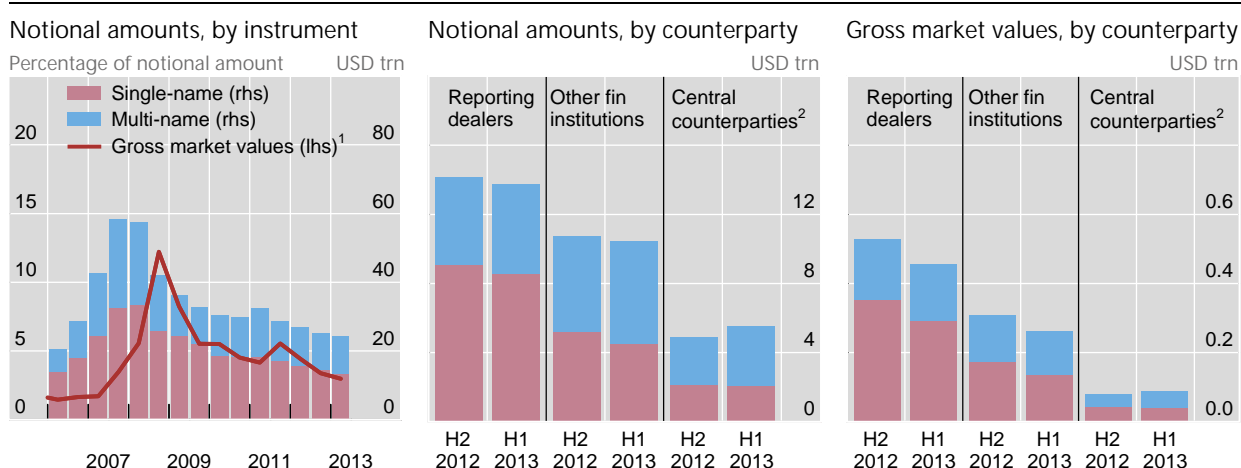
Gross market values for CDS continued to fall, by 14%, to \$725 billion, the lowest level since June 2007 (Graph 6, left-hand panel). This development was led by single-name contracts (-18%), consistent with default risk expectations for specific default risks having retreated somewhat during the first half of 2013, reducing the market value of existing contracts.

The sectoral share of CDS counterparties was broadly unchanged compared with end-2012. Reporting dealers continued to account for 56% of total contracts, and other financial institutions for 43%. The share of CDS cleared centrally with CCPs was stationary for single-name contracts (8%),⁴ but it increased slightly (from 15% to 18%) for multi-name contracts (Graph 6, centre panel). Non-financial customers were almost entirely absent from this market, accounting for only 1% of total amounts outstanding.

Contracts with special purpose vehicles and with banks dropped relatively sharply, by 37% and 25%, respectively (Table 7). This was partly due to a 56% fall in contracts referencing non-financial firms and a 69% decline in contracts referencing securitised products, respectively. Hedge funds played a bigger role (+12%), by increasing the amount of their contracts referencing financial firms by 50%.

Credit default swaps

Graph 6



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

Source: BIS semiannual OTC derivatives statistics.

⁴ Original trades adjusted for double-counting, since a single contract initially agreed between two CCP members is replaced by two separate contracts, between the CCP and each of the counterparties.

Credit default swaps outstanding by location of counterparty

The geographical division of CDS counterparties on an ultimate risk basis (Table 8) indicates that overall activity with counterparties abroad was steady between end-2012 and end-June 2013 (+3%), while declining in dealers' home countries (-22%), at least in aggregate. The home country decline was driven by business with non-reporting customers, while the smaller inter-dealer segment jumped 57%.

CDS business is mostly foreign business, and the data are available with a regional breakdown of foreign counterparties for the first time. At end-June 2013, contracts with counterparties in the home country accounted for only 19% of notional amounts outstanding, while CDS business with counterparties abroad was four times larger. The new data reveal that contract volume with counterparties in the advanced economies of Europe is the most substantial, accounting for two thirds of total business abroad at end-June 2013, while foreign business with counterparties in the United States accounted for another 26% of total positions abroad.

The counterparty division of CDS deals outstanding differs markedly between regions, but to some extent this reflects the geographical concentration of reporting dealers. Almost 65% of CDS foreign deals in Europe are with other reporting dealers. CDS inter-dealer business is even more dominant in Japan (71%), but on a much smaller absolute scale. In other Asian countries, Latin America and countries not specifically identified, the share of CDS deals with non-reporters is much larger, reflecting to some extent the fact that any dealers headquartered in these countries are not included in the semiannual survey.

Concentration indices

Herfindahl indices calculated on the basis of responses from individual dealers provide a measure of size concentration for dealers in semiannually reporting OTC derivatives markets.⁵ In the large interest rate swap segment, end-June 2013 concentration was highest for Swedish krona options (Table 9a). This development was driven by business with non-reporters (Table 9g). Concentration in Canadian dollar interest rate options fell back somewhat. As usual, concentration was lowest for euro interest rate instruments and in yen swaps.

⁵ The calculation and the range of variation of the Herfindahl indices reported are described in Section 3.

3. Explanatory notes

Participating authorities

Central banks and other authorities in the following 13 jurisdictions participate in the 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

In addition to the 13 jurisdictions listed above, central banks and other authorities in the following 34 jurisdictions participate in the Triennial Central Bank Survey of positions in OTC derivatives markets. The same authorities participated in the 2010 survey.

Argentina	Central Bank of Argentina	Korea	Bank of Korea
Austria	Central Bank of the Republic of Austria	Latvia	Bank of Latvia
Bahrain	Bahrain Monetary Agency	Malaysia	Central Bank of Malaysia
Brazil	Central Bank of Brazil	Mexico	Bank of Mexico
Bulgaria	Bulgarian National Bank	Norway	Central Bank of Norway
Chile	Central Bank of Chile	Peru	Central Reserve Bank of Peru
China	People's Bank of China	Philippines	Bangko Sentral ng Pilipinas
	State Administration of Foreign Exchange	Poland	National Bank of Poland
Chinese Taipei	Central Bank of China	Portugal	Bank of Portugal
Colombia	Bank of the Republic	Romania	National Bank of Romania
Denmark	Danmarks Nationalbank	Russia	Central Bank of the Russian Federation
Finland	Bank of Finland	Saudi Arabia	Saudi Arabian Monetary Agency
Greece	Bank of Greece	Singapore	Monetary Authority of Singapore
Hong Kong SAR	Hong Kong Monetary Authority	South Africa	South African Reserve Bank
Hungary	Magyar Nemzeti Bank	Thailand	Bank of Thailand
India	Reserve Bank of India	Turkey	Central Bank of the Republic of Turkey
Indonesia	Bank Indonesia		
Ireland	Central Bank of Ireland		
Israel	Bank of Israel		

Reporting basis

Data are reported on a consolidated basis. This means that data from all branches and (majority-owned) subsidiaries worldwide of a given institution are aggregated and reported by the parent institution to the official 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 provide a more accurate measure of the scale of financial risk transfer taking place in derivatives markets.

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

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

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

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

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

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

Instrument types

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

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

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

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

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

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

Definitions for foreign exchange transactions

Outright forward:	Transaction involving the exchange of two currencies at a rate agreed on the date of the contract for value or delivery (cash settlement) at some time in the future (more than two business days later). This category also includes forward foreign exchange agreement (FXA) transactions, non-deliverable forwards and other forward contracts for differences.
Foreign exchange swap:	Transaction involving the actual exchange of two currencies (principal amount only) on a specific date at a rate agreed at the time of the conclusion of the contract (the short leg), and a reverse exchange of the same two currencies at a date further in the future at a rate (generally different from the rate applied to the short leg) agreed at the time of the contract (the long leg). Both spot/forward and forward/forward swaps should be included. Short-term swaps carried out as "tomorrow/next day" transactions should also be included in this category.
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 the OTC options section takes precedence in the instrument classification, so that any product with an embedded option is reported as an OTC option. All other OTC products are reported in the forwards and swaps section.

Counterparties and elimination of double-counting

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

Reporting dealers: Institutions whose head office is located in one of the 13 reporting countries (Australia, Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Spain, Sweden,

Switzerland, the United Kingdom and the United States) and which participate in the semiannual OTC derivatives market statistics; in addition, reporting dealers include all branches and subsidiaries of these entities worldwide; “reporting dealers” will mainly be commercial and investment banks and securities houses, including their branches and subsidiaries and other entities that are active dealers.

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

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

- Banks and securities firms: smaller commercial banks, investment banks and securities houses that do not participate in the survey.
- 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”.

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”.

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

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

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

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

are investment grade, and to (2) “below investment grade” if the underlying reference entities are sub-investment grade.

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

Sector of the reference entity

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. Statistical tables for the semiannual survey

Table 1

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

	Notional amounts outstanding				Gross market value			
	H2 2011	H1 2012	H2 2012	H1 2013	H2 2011	H1 2012	H2 2012	H1 2013
GRAND TOTAL	647,811	639,396	632,579	692,908	27,307	25,417	24,740	20,158
A. Foreign exchange contracts	63,381	66,672	67,358	73,121	2,582	2,240	2,304	2,424
Outright forwards and forex swaps	30,526	31,395	31,718	34,421	919	771	803	953
Currency swaps	22,791	24,156	25,420	24,654	1,318	1,184	1,247	1,131
Options	10,065	11,122	10,220	14,046	345	285	254	339
Memo: Exchange-traded contracts ²	308	325	336	341	...	...	...	...
B. Interest rate contracts³	504,117	494,427	489,703	561,299	20,001	19,113	18,833	15,155
FRAs	50,596	64,711	71,353	86,334	67	51	47	168
Swaps	402,611	379,401	369,999	425,569	18,046	17,214	17,080	13,663
Options	50,911	50,314	48,351	49,396	1,888	1,848	1,706	1,325
Memo: Exchange-traded contracts ²	53,298	55,580	48,551	62,177	...	...	...	...
C. Equity-linked contracts	5,982	6,313	6,251	6,821	679	645	605	693
Forwards and swaps	1,738	1,880	2,045	2,321	156	147	157	206
Options	4,244	4,434	4,207	4,501	523	497	448	487
Memo: Exchange-traded contracts ²	2,956	3,561	3,573	3,793	...	...	...	...
D. Commodity contracts⁴	3,091	2,994	2,587	2,458	481	390	358	386
Gold	521	523	486	461	75	61	53	80
Other	2,570	2,471	2,101	1,997	405	328	306	306
Forwards and swaps	1,745	1,659	1,363	1,327	...	...	...	...
Options	824	812	739	670	...	...	...	...
E. Credit default swaps⁵	28,626	26,931	25,069	24,349	1,586	1,187	848	725
Single-name instruments	16,865	15,566	14,309	13,135	958	715	527	430
Multi-name instruments	11,761	11,364	10,760	11,214	628	472	321	295
Index products	...	9,731	9,663	10,170	...	...	...	...
F. Unallocated⁶	42,613	42,059	41,611	24,860	1,978	1,842	1,792	775
GROSS CREDIT EXPOSURE⁷	...	...	...	...	3,939	3,691	3,609	3,900
Memo: Exchange-traded contracts ^{2,8}	56,563	59,466	52,460	66,311	...	...	...	...

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			
	H2 2011	H1 2012	H2 2012	H1 2013	H2 2011	H1 2012	H2 2012	H1 2013
Total contracts	63,381	66,672	67,358	73,121	2,582	2,240	2,304	2,424
With reporting dealers	27,953	29,484	28,834	30,690	1,041	876	942	992
With other financial institutions	25,916	27,538	28,831	31,757	989	884	909	996
With non-financial customers	9,512	9,651	9,693	10,674	552	480	453	436
Up to 1 year ³	45,349	48,469	48,135	53,677	...	...	...	...
Between 1 and 5 years ³	12,769	12,854	13,728	13,802	...	...	...	...
Over 5 years ³	5,264	5,350	5,495	5,642	...	...	...	...
US dollar	54,087	57,375	57,599	64,309	2,106	1,819	1,868	2,051
Euro	23,238	24,293	23,796	24,399	1,018	880	759	622
Yen	13,693	13,667	14,113	15,217	617	529	827	685
Sterling	7,023	7,591	7,825	8,445	237	213	207	207
Swiss franc	4,081	4,055	3,832	4,181	224	170	154	125
Canadian dollar	2,862	3,002	3,099	3,280	97	89	80	103
Swedish krona	1,488	1,498	1,453	1,389	35	35	36	35
Other	20,289	21,863	22,999	25,021	829	746	676	1,019
<i>Memo: Exchange-traded contracts⁴</i>	308	325	336	341	...	...	...	...

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			
	H2 2011	H1 2012	H2 2012	H1 2013	H2 2011	H1 2012	H2 2012	H1 2013
Total contracts	504,117	494,427	489,703	561,299	20,001	19,113	18,833	15,155
With reporting dealers	157,348	139,146	116,896	104,225	6,453	6,568	6,024	4,487
With other financial institutions	310,518	316,905	338,076	421,235	12,450	11,483	11,669	9,800
With non-financial customers	36,252	38,376	34,731	35,839	1,098	1,062	1,141	869
Up to 1 year ²	199,363	207,236	190,672	219,237	...	...	...	...
Between 1 and 5 years ²	176,420	170,252	180,260	206,880	...	...	...	...
Over 5 years ²	128,334	116,938	118,771	135,182	...	...	...	...
US dollar	161,864	164,024	148,676	169,029	7,993	7,386	5,936	4,757
Euro	184,702	179,076	187,363	227,356	8,023	7,941	9,067	7,258
Yen	66,819	60,092	54,812	55,071	1,132	1,055	911	714
Sterling	43,367	39,913	42,244	46,334	1,655	1,462	1,616	1,103
Swiss franc	5,395	5,494	5,357	5,583	193	161	149	113
Canadian dollar	6,397	7,380	7,507	9,333	205	195	166	146
Swedish krona	5,844	6,994	6,193	5,906	120	94	116	73
Other	29,729	31,452	37,551	42,687	682	819	872	990
<i>Memo: Exchange-traded contracts³</i>	<i>53,298</i>	<i>55,580</i>	<i>48,551</i>	<i>62,177</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
	H2 2012			H1 2013			H2 2012	H1 2013	H1 2013
	Bought	Sold	Total	Bought	Sold	Total			
Total contracts	19,844	19,373	25,069	19,257	18,820	24,349	848	725	152
With reporting dealers	14,100	14,197	14,149	13,711	13,745	13,728	529	455	64
With other financial institutions	5,612	5,108	10,720	5,425	5,004	10,429	309	260	80
Central counterparties ²	2,444	2,447	4,891	2,776	2,772	5,548	78	87	9
Banks and security firms	1,609	1,354	2,963	1,220	996	2,216	102	66	16
Insurance firms	191	68	258	165	66	230	12	9	7
SPVs, SPCs and SPEs	406	181	587	292	80	372	27	21	12
Hedge funds	373	584	957	443	633	1,076	39	42	15
Other financial customers	589	474	1,063	529	457	986	50	35	22
With non-financial customers	132	68	200	122	71	193	10	10	8
Single-name credit default swaps	11,711	11,629	14,309	10,886	10,808	13,135	527	430	...
With reporting dealers	8,989	9,073	9,031	8,564	8,553	8,559	350	292	...
With other financial institutions	2,647	2,523	5,170	2,279	2,219	4,498	171	134	...
Central counterparties ²	1,031	1,047	2,078	1,024	1,023	2,047	41	38	...
Banks and security firms	962	816	1,778	745	618	1,363	62	42	...
Insurance firms	75	39	114	54	31	84	8	5	...
SPVs, SPCs and SPEs	145	80	225	67	31	98	12	10	...
Hedge funds	158	307	464	141	302	443	18	19	...
Other financial customers	277	234	511	249	214	463	29	19	...
With non-financial customers	74	33	108	43	36	78	5	4	...
Multi-name credit default swaps	8,133	7,744	10,760	8,371	8,013	11,214	321	295	...
With reporting dealers	5,111	5,124	5,118	5,146	5,192	5,169	179	164	...
With other financial institutions	2,965	2,585	5,549	3,146	2,785	5,931	138	126	...
Central counterparties ²	1,413	1,400	2,813	1,752	1,749	3,501	37	49	...
Banks and security firms	647	538	1,185	475	378	853	40	24	...
Insurance firms	116	28	144	111	35	146	5	4	...
SPVs, SPCs and SPEs	261	101	362	225	49	274	15	11	...
Hedge funds	215	278	493	302	331	633	21	23	...
Other financial customers	312	240	552	280	243	523	21	16	...
With non-financial customers	58	35	93	79	35	114	4	5	...
of which: index products	7,254	7,151	9,663	7,545	7,429	10,170	...	...	...
With reporting dealers	4,750	4,736	4,743	4,797	4,810	4,804	...	...	...
With other financial institutions	2,478	2,392	4,870	2,699	2,597	5,296	...	...	...
Central counterparties ²	1,413	1,398	2,811	1,749	1,747	3,495	...	...	...
Banks and security firms	531	482	1,013	370	326	695	...	...	...
Insurance firms	49	23	72	51	27	78	...	...	...
SPVs, SPCs and SPEs	93	81	174	69	33	102	...	...	...
Hedge funds	205	269	474	292	325	617	...	...	...
Other financial customers	186	138	325	168	139	308	...	...	...
With non-financial customers	27	24	50	48	22	70	...	...	...

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		
	H1 2012	H2 2012	H1 2013	H1 2012	H2 2012	H1 2013	H1 2012	H2 2012	H1 2013	H1 2012	H2 2012	H1 2013
Total contracts	26,931	25,069	24,349	16,714	15,102	15,229	5,151	5,147	4,387	5,066	4,819	4,734
With reporting dealers	15,747	14,149	13,728	9,575	8,303	8,270	3,360	3,018	2,723	2,812	2,828	2,735
With other financial institutions	10,997	10,720	10,429	7,042	6,693	6,832	1,759	2,098	1,625	2,195	1,929	1,972
Central counterparties ³	5,209	4,891	5,548	3,720	3,464	4,013	686	848	715	802	578	821
Banks and security firms	2,919	2,963	2,216	1,759	1,747	1,364	613	758	450	548	459	402
Insurance firms	278	258	230	130	113	117	39	61	37	109	84	76
SPVs, SPCs and SPEs	458	587	372	198	289	174	44	52	44	217	246	155
Hedge funds	1,008	957	1,076	637	553	685	200	199	222	171	204	169
Other financial customers	1,125	1,063	986	599	527	479	178	179	157	348	357	350
With non-financial customers	187	200	193	96	106	127	31	32	38	59	63	27
Single-name credit default swaps	15,566	14,309	13,135	10,693	9,712	9,150	3,224	2,830	2,490	1,649	1,767	1,495
With reporting dealers	10,011	9,031	8,559	6,492	5,846	5,669	2,485	2,087	1,899	1,034	1,098	990
With other financial institutions	5,441	5,170	4,498	4,138	3,806	3,421	726	732	580	577	632	498
Central counterparties ³	2,352	2,078	2,047	2,080	1,728	1,735	178	155	141	95	195	172
Banks and security firms	1,840	1,778	1,363	1,241	1,223	959	320	337	223	279	218	181
Insurance firms	111	114	84	66	63	55	8	23	14	37	28	16
SPVs, SPCs and SPEs	131	225	98	68	158	60	28	36	21	35	31	17
Hedge funds	497	464	443	329	282	294	113	104	104	55	78	45
Other financial customers	509	511	463	354	352	319	79	77	78	76	82	66
With non-financial customers	114	108	78	63	59	60	13	11	11	38	37	7
Multi-name credit default swaps	11,364	10,760	11,214	6,021	5,390	6,078	1,926	2,317	1,897	3,417	3,052	3,239
With reporting dealers	5,736	5,118	5,169	3,084	2,457	2,601	875	931	825	1,778	1,730	1,744
With other financial institutions	5,555	5,549	5,931	2,904	2,887	3,411	1,033	1,366	1,045	1,618	1,297	1,475
Central counterparties ³	2,856	2,813	3,501	1,640	1,736	2,278	509	693	574	708	383	649
Banks and security firms	1,079	1,185	853	518	523	405	293	421	228	269	241	221
Insurance firms	166	144	146	64	50	63	31	38	23	72	56	60
SPVs, SPCs and SPEs	327	362	274	130	131	114	15	16	23	182	215	138
Hedge funds	511	493	633	308	271	391	87	95	118	116	126	123
Other financial customers	616	552	523	245	176	160	99	102	80	272	275	283
With non-financial customers	73	93	114	33	46	67	18	21	27	22	25	20

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		
	H1 2012	H2 2012	H1 2013	H1 2012	H2 2012	H1 2013	H1 2012	H2 2012	H1 2013	H1 2012	H2 2012	H1 2013
Total contracts	26,931	25,069	24,349	5,615	5,078	4,316	18,248	18,056	18,360	3,068	1,935	1,674
With reporting dealers	15,747	14,149	13,728	3,562	3,173	2,718	10,546	9,962	10,106	1,639	1,013	905
With other financial institutions	10,997	10,720	10,429	2,026	1,879	1,568	7,579	7,953	8,139	1,391	888	722
Central counterparties ²	5,209	4,891	5,548	948	761	744	3,661	3,827	4,588	600	302	215
Banks and security firms	2,919	2,963	2,216	649	692	497	2,025	2,061	1,604	244	210	115
Insurance firms	278	258	230	38	33	27	161	171	162	78	54	41
SPVs, SPCs and SPEs	458	587	372	48	88	50	293	429	289	117	70	33
Hedge funds	1,008	957	1,076	174	155	155	657	686	800	177	116	121
Other financial customers	1,125	1,063	986	169	150	95	781	778	695	175	136	196
With non-financial customers	187	200	193	26	25	30	123	141	116	38	34	47
Single-name credit default swaps	15,566	14,309	13,135	3,508	3,519	3,158	10,432	9,725	8,817	1,626	1,065	1,160
With reporting dealers	10,011	9,031	8,559	2,384	2,312	2,114	6,669	6,106	5,749	958	613	695
With other financial institutions	5,441	5,170	4,498	1,109	1,188	1,036	3,683	3,546	3,022	649	437	440
Central counterparties ²	2,352	2,078	2,047	464	470	496	1,665	1,469	1,438	223	139	113
Banks and security firms	1,840	1,778	1,363	468	487	393	1,207	1,177	890	165	114	80
Insurance firms	111	114	84	16	18	14	62	73	51	33	23	19
SPVs, SPCs and SPEs	131	225	98	11	43	17	75	149	64	46	33	17
Hedge funds	497	464	443	65	81	49	339	327	325	93	56	69
Other financial customers	509	511	463	85	88	67	335	351	253	89	71	143
With non-financial customers	114	108	78	15	19	8	81	73	46	18	16	25
Multi-name credit default swaps	11,364	10,760	11,214	2,106	1,559	1,157	7,816	8,330	9,543	1,442	870	513
With reporting dealers	5,736	5,118	5,169	1,178	861	604	3,877	3,856	4,356	680	401	209
With other financial institutions	5,555	5,549	5,931	917	692	532	3,896	4,407	5,117	742	451	282
Central counterparties ²	2,856	2,813	3,501	484	291	248	1,996	2,358	3,150	376	163	103
Banks and security firms	1,079	1,185	853	181	205	104	818	884	714	80	96	36
Insurance firms	166	144	146	22	15	14	99	98	110	45	31	22
SPVs, SPCs and SPEs	327	362	274	37	44	33	218	281	225	71	37	16
Hedge funds	511	493	633	108	74	106	318	359	475	84	60	52
Other financial customers	616	552	523	84	62	28	446	427	442	86	64	53
With non-financial customers	73	93	114	11	6	22	43	68	70	19	18	22

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	
	H2 2012	H1 2013	H2 2012	H1 2013	H2 2012	H1 2013	H2 2012	H1 2013	H2 2012	H1 2013	H2 2012	H1 2013
Total contracts	25,069	24,349	2,941	3,243	6,420	6,404	9,299	8,360	903	732	5,505	5,606
With reporting dealers	14,149	13,728	2,114	2,430	3,491	3,340	5,421	4,916	455	509	2,668	2,532
With other financial institutions	10,720	10,429	807	791	2,888	3,041	3,819	3,401	437	210	2,768	2,984
Central counterparties ³	4,891	5,548	121	133	1,402	1,629	1,935	2,002	5	7	1,428	1,777
Banks and security firms	2,963	2,216	414	393	715	565	1,095	736	295	90	445	431
Insurance firms	258	230	14	16	68	47	59	57	45	31	73	79
SPVs, SPCs and SPEs	587	372	29	22	99	80	181	79	17	15	260	176
Hedge funds	957	1,076	119	118	308	462	305	304	32	36	194	157
Other financial customers	1,063	986	111	110	297	258	245	222	43	30	367	363
With non-financial customers	200	193	20	22	41	24	59	43	11	13	69	91
Single-name credit default swaps	14,309	13,135	2,799	3,098	3,853	3,202	7,657	6,836	0	0	0	0
With reporting dealers	9,031	8,559	2,011	2,325	2,502	2,174	4,518	4,060	0	0	0	0
With other financial institutions	5,170	4,498	768	752	1,312	1,006	3,090	2,740	0	0	0	0
Central counterparties ³	2,078	2,047	120	128	380	316	1,578	1,603	0	0	0	0
Banks and security firms	1,778	1,363	401	374	472	350	905	639	0	0	0	0
Insurance firms	114	84	14	15	54	29	46	40	0	0	0	0
SPVs, SPCs and SPEs	225	98	8	10	60	31	158	58	0	0	0	0
Hedge funds	464	443	117	116	126	98	221	229	0	0	0	0
Other financial customers	511	463	109	109	220	182	183	172	0	0	0	0
With non-financial customers	108	78	20	21	39	21	49	36	0	0	0	0
Multi-name credit default swaps	10,760	11,214	143	145	2,567	3,203	1,642	1,524	903	732	5,505	5,606
With reporting dealers	5,118	5,169	104	105	989	1,165	902	856	455	509	2,668	2,532
With other financial institutions	5,549	5,931	38	39	1,576	2,035	729	661	437	210	2,768	2,984
Central counterparties ³	2,813	3,501	1	4	1,022	1,312	356	400	5	7	1,428	1,777
Banks and security firms	1,185	853	13	19	243	215	189	97	295	90	445	431
Insurance firms	144	146	0	1	13	18	13	17	45	31	73	79
SPVs, SPCs and SPEs	362	274	21	12	40	49	23	22	17	15	260	176
Hedge funds	493	633	1	1	181	364	84	75	32	36	194	157
Other financial customers	552	523	2	2	78	76	62	50	43	30	367	363
With non-financial customers	93	114	1	1	1	3	10	7	11	13	69	91

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		
	H1 2012	H2 2012	H1 2013	H1 2012	H2 2012	H1 2013	H1 2012	H2 2012	H1 2013
All locations	26,931	25,069	24,349	15,747	14,149	13,728	11,183	10,920	10,622
Home country ²	5,359	6,106	4,744	2,762	1,625	2,549	2,597	4,481	2,195
Abroad	21,572	18,963	19,606	12,986	12,524	11,179	8,586	6,439	8,426
US	...	...	5,132	...	...	2,484	...	...	2,648
Japan	...	...	196	...	...	139	...	...	57
European developed countries	...	...	13,011	...	...	8,480	...	...	4,531
Latin America	...	...	600	...	...	7	...	...	594
Other Asian countries	...	...	187	...	...	9	...	...	178
All other countries	...	...	479	...	...	61	...	...	419

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 2000	1,418	856	1,458	1,421	655	1,432	851	511	530	614	429	677	1,014	545	715	936	586	1,036	755	500	782
Dec 2000	1,452	876	1,791	1,274	688	2,439	1,107	500	565	728	448	662	1,109	585	791	957	640	1,076	879	528	819
Jun 2001	1,347	874	1,621	1,264	678	1,239	936	486	559	693	438	648	1,937	613	708	1,125	592	989	888	529	764
Dec 2001	1,812	1,044	1,702	1,252	788	1,228	740	524	584	638	476	727	1,758	706	1,217	1,002	608	1,081	1,145	730	1,143
Jun 2002	1,556	1,044	1,682	1,234	824	1,461	556	478	561	605	489	648	1,763	779	1,202	944	532	1,149	907	666	1,044
Dec 2002	1,818	1,047	2,112	1,218	846	1,693	571	492	546	610	515	615	1,942	790	1,624	886	569	1,224	1,042	682	1,038
Jun 2003	1,530	1,041	2,161	1,264	896	1,684	539	481	608	607	544	643	1,972	806	1,223	839	561	1,174	901	701	961
Dec 2003	1,522	1,039	2,226	1,269	852	1,616	639	478	591	1,095	565	666	1,647	744	1,065	947	570	1,230	786	672	877
Jun 2004	1,965	1,048	2,313	1,169	797	1,796	670	473	675	930	594	747	1,308	728	978	965	583	1,137	725	626	847
Dec 2004	1,855	1,051	2,830	1,278	851	1,583	611	472	668	933	574	1,480	1,898	699	776	892	587	1,084	641	667	760
Jun 2005	1,659	1,000	2,955	1,158	936	1,508	631	479	567	855	614	1,288	2,565	664	781	811	564	1,077	652	650	756
Dec 2005	1,649	1,017	3,052	1,630	1,015	1,584	667	484	539	1,210	661	905	3,025	635	793	767	571	1,259	690	691	762
Jun 2006	1,670	1,018	2,703	1,698	1,080	1,398	690	503	534	1,083	707	958	3,280	613	824	847	586	1,431	788	678	816
Dec 2006	1,499	1,020	2,952	1,919	1,149	1,205	783	561	569	1,024	692	916	3,468	620	768	1,068	594	1,638	917	679	830
Jun 2007	1,164	987	2,978	2,043	1,150	1,045	812	623	604	1,120	736	806	2,569	675	799	1,096	628	1,945	850	686	865
Dec 2007	1,122	985	2,962	2,032	1,162	948	709	596	596	1,066	765	777	2,302	673	745	1,242	660	2,337	967	698	982
Jun 2008	1,405	976	3,314	1,712	1,336	899	648	562	594	1,055	830	824	1,981	660	938	1,152	677	1,904	881	729	1,020
Dec 2008	1,160	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	1,607	1,013	662	559	633	923	908	917	1,204	554	816	873	872	1,832	1,070	754	782
Jun 2013	1,023	777	2,040	1,795	1,528	1,005	663	549	647	979	880	940	1,116	550	770	843	885	3,042	925	693	767

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

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

Table 9d

Herfindahl indices for OTC interest rate derivatives contracts between reporters¹

	Canadian dollar			Swiss franc			Euro			Sterling			Japanese yen			Swedish krona			US dollar		
	FRAs ²	IRS ³	Opts. ⁴	FRAs ²	IRS ³	Opts. ⁴	FRAs ²	IRS ³	Opts. ⁴	FRAs ²	IRS ³	Opts. ⁴	FRAs ²	IRS ³	Opts. ⁴	FRAs ²	IRS ³	Opts. ⁴	FRAs ²	IRS ³	Opts. ⁴
Jun 2001	1,365	818	1,558	1,211	705	1,350	954	506	618	769	458	826	2,319	691	803	1,279	601	857	934	577	832
Dec 2001	2,266	1,008	1,474	1,270	822	1,041	727	571	642	697	490	828	2,194	801	1,381	979	623	898	1,046	784	1,111
Jun 2002	1,992	949	1,720	1,262	854	1,220	540	503	636	647	497	786	2,095	866	1,665	962	530	1,143	1,070	719	1,239
Dec 2002	2,325	893	2,426	1,594	890	1,441	547	505	558	648	550	685	2,316	895	1,749	938	570	1,148	1,440	757	1,144
Jun 2003	2,000	974	2,695	1,606	835	1,487	555	474	600	576	522	670	2,379	935	1,423	970	569	1,101	1,142	757	991
Dec 2003	1,814	1,018	2,811	1,475	833	1,347	540	478	575	746	547	661	1,803	894	1,383	1,211	602	1,232	978	751	899
Jun 2004	2,118	1,008	2,722	1,348	800	1,691	506	474	605	1,012	723	721	1,463	843	1,158	1,125	651	1,111	791	678	820
Dec 2004	2,218	1,045	3,135	1,401	815	1,634	576	470	649	939	691	845	2,291	792	855	996	664	1,098	625	716	770
Jun 2005	1,815	938	2,333	1,244	932	1,223	661	483	556	977	695	842	3,163	749	871	902	641	1,036	604	682	783
Dec 2005	1,979	978	2,659	1,710	1,043	1,214	679	496	547	1,180	751	870	3,447	706	903	769	650	1,265	703	729	807
Jun 2006	1,698	996	2,686	1,813	1,169	1,296	707	515	557	1,090	756	908	3,841	661	881	771	658	1,830	782	695	979
Dec 2006	1,687	1,007	2,738	2,321	1,229	1,034	819	514	577	1,024	702	890	3,662	646	842	892	654	1,350	884	683	880
Jun 2007	1,246	952	2,342	2,086	1,217	901	701	512	616	936	729	801	2,354	705	972	918	676	1,504	825	672	889
Dec 2007	1,088	945	2,578	2,183	1,176	935	637	542	669	1,003	799	832	2,853	731	814	1,131	744	2,278	916	694	767
Jun 2008	1,315	978	2,641	1,868	1,470	844	642	566	665	1,177	944	813	2,279	748	1,063	1,193	785	1,721	952	764	925
Dec 2008	1,123	1,015	2,851	2,027	1,397	929	562	593	720	1,309	1,080	857	2,624	723	993	1,176	865	1,280	959	807	1,076
Jun 2009	1,256	1,109	3,202	2,026	1,483	1,097	608	590	670	1,396	1,131	929	2,359	678	947	1,142	974	1,193	1,041	811	998
Dec 2009	1,088	1,076	2,508	2,199	1,518	1,022	630	523	690	1,149	1,040	1,045	1,810	594	946	1,070	1,074	1,316	1,098	775	993
Jun 2010	1,488	1,051	2,451	2,189	1,681	1,045	660	524	699	1,310	859	1,184	1,417	559	1,056	1,075	1,200	1,545	1,043	723	987
Dec 2010	1,257	1,017	2,229	2,522	1,630	964	591	529	652	956	857	999	1,056	538	1,053	862	1,140	1,982	1,153	803	837
Jun 2011	1,278	974	1,930	1,950	1,548	1,169	599	481	646	954	871	1,054	1,239	504	1,215	872	1,204	1,649	1,063	755	878
Dec 2011	1,508	979	2,066	1,666	1,489	1,036	550	424	655	988	815	1,025	2,144	501	1,120	880	1,289	1,641	1,054	732	867
Jun 2012	1,343	1,000	1,956	2,084	1,480	892	877	412	633	1,027	887	999	2,690	492	1,016	927	1,126	1,891	1,149	682	817
Dec 2012	1,303	1,136	2,691	3,058	1,400	925	1,056	411	662	908	870	942	3,401	495	897	897	1,055	1,655	1,033	686	804
Jun 2013	1,080	1,111	1,934	3,742	1,305	850	1,623	420	670	949	863	970	3,371	489	860	940	1,167	1,907	1,325	678	775

¹ Reporters (reporting dealers) are defined as those institutions whose head office is located in one of the 13 reporting countries and which participate in the semiannual OTC derivatives market statistics; in addition, reporting dealers include all branches and subsidiaries of these entities worldwide; reporting dealers will mainly be commercial and investment banks and securities houses, including their branches and subsidiaries and other entities which are active dealers. ² Forward rate agreements. ³ Interest rate swaps. ⁴ Interest rate options.

Table 9e
Herfindahl indices for OTC foreign exchange derivatives
contracts between reporters¹

Period	Forwards, forex swaps and currency swaps	Options
Jun 2000	437	550
Dec 2000	430	558
Jun 2001	411	496
Dec 2001	464	614
Jun 2002	444	526
Dec 2002	452	512
Jun 2003	478	538
Dec 2003	463	518
Jun 2004	499	683
Dec 2004	491	700
Jun 2005	493	635
Dec 2005	534	705
Jun 2006	532	656
Dec 2006	523	603
Jun 2007	516	588
Dec 2007	544	634
Jun 2008	557	761
Dec 2008	575	711
Jun 2009	647	767
Dec 2009	650	740
Jun 2010	602	681
Dec 2010	606	689
Jun 2011	559	664
Dec 2011	488	671
Jun 2012	490	692
Dec 2012	541	937
Jun 2013	486	848

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Table 9f

Herfindahl indices for OTC equity-linked derivatives contracts between reporters¹

	Europe		Japan		Latin America		Other Asia		United States	
	Forwards and swaps	Options	Forwards and swaps	Options	Forwards and swaps	Options	Forwards and swaps	Options	Forwards and swaps	Options
Jun 2000	694	943	3,614	1,288	4,116	7,398	7,915	2,502	850	975
Dec 2000	938	874	5,209	1,758	5,115	3,433	3,550	1,604	1,136	1,020
Jun 2001	948	834	2,844	908	10,000	3,613	4,962	2,152	2,424	753
Dec 2001	859	912	2,541	924	10,000	4,273	9,879	2,120	1,315	783
Jun 2002	840	737	3,220	1,137	6,242	4,772	9,740	3,290	2,542	765
Dec 2002	753	728	2,435	968	4,863	8,724	5,494	3,678	1,632	951
Jun 2003	639	655	2,225	2,433	5,556	3,090	7,022	3,520	708	1,555
Dec 2003	705	676	2,789	1,698	6,932	7,515	5,918	3,166	889	668
Jun 2004	582	697	1,275	1,127	3,851	5,133	3,675	2,526	800	774
Dec 2004	669	714	2,394	1,115	3,284	4,587	2,467	874	931	762
Jun 2005	618	748	2,068	838	3,387	5,707	2,482	1,000	870	803
Dec 2005	757	779	1,836	5,063	5,729	9,957	2,062	995	787	851
Jun 2006	568	829	1,600	3,606	7,743	1,784	1,924	873	629	1,316
Dec 2006	705	873	1,699	2,216	5,273	3,253	1,189	931	1,118	915
Jun 2007	862	760	1,495	1,218	6,676	3,744	1,819	982	679	882
Dec 2007	1,068	751	1,904	1,147	7,056	2,948	2,114	991	879	765
Jun 2008	796	832	1,335	989	5,350	5,032	1,909	1,159	825	796
Dec 2008	881	1,104	1,291	897	9,659	4,112	1,561	1,270	999	941
Jun 2009	1,093	1,074	1,323	1,104	5,296	4,184	1,807	1,439	1,143	1,130
Dec 2009	935	987	973	940	9,590	6,205	1,506	1,228	1,170	1,162
Jun 2010	949	1,252	737	819	9,685	6,196	1,808	1,408	1,220	1,255
Dec 2010	921	1,141	701	846	6,486	8,835	2,283	1,398	1,036	1,367
Jun 2011	793	963	1,036	894	5,894	2,444	1,307	1,489	963	1,179
Dec 2011	823	947	952	825	4,881	2,346	1,517	1,190	861	1,085
Jun 2012	916	995	1,020	913	4,425	3,456	2,060	1,258	799	1,144
Dec 2012	790	1,019	1,069	971	4,791	4,708	1,866	1,425	862	1,071
Jun 2013	990	848	1,299	1,081	4,620	6,593	1,599	1,417	811	1,128

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Table 9g

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

	Canadian dollar			Swiss franc			Euro			Sterling			Japanese yen			Swedish krona			US dollar		
	FRA ²	IRS ³	Opts. ⁴	FRA ²	IRS ³	Opts. ⁴	FRA ²	IRS ³	Opts. ⁴	FRA ²	IRS ³	Opts. ⁴	FRA ²	IRS ³	Opts. ⁴	FRA ²	IRS ³	Opts. ⁴	FRA ²	IRS ³	Opts. ⁴
Jun 2000	1,567	1,050	1,963	1,961	741	1,361	1,294	557	615	735	541	689	3,153	571	729	1,340	760	1,260	805	545	815
Dec 2000	1,412	1,050	2,065	1,638	725	4,531	1,449	513	541	884	503	717	2,502	632	759	1,341	784	1,444	1,338	574	814
Jun 2001	2,114	1,167	1,917	1,639	703	1,147	1,032	515	543	683	489	704	3,915	575	656	2,073	716	1,209	1,395	538	792
Dec 2001	2,003	1,495	2,111	2,171	951	2,146	1,040	540	578	797	562	766	4,132	625	1,009	1,771	771	1,379	1,978	731	1,275
Jun 2002	1,681	1,568	1,996	2,250	1,082	2,061	831	529	499	773	599	772	4,983	717	946	1,849	751	1,221	1,089	694	1,058
Dec 2002	1,991	1,631	2,451	2,079	1,099	2,254	931	559	607	879	604	719	3,782	739	1,402	1,690	717	1,339	1,319	683	1,018
Jun 2003	1,681	1,374	2,174	1,933	1,261	2,354	814	563	707	1,247	669	797	2,431	767	911	916	707	1,330	1,265	725	1,030
Dec 2003	2,079	1,366	2,269	1,990	1,035	2,140	1,209	551	684	2,928	685	781	2,105	762	802	879	638	1,327	859	674	915
Jun 2004	2,092	1,423	2,448	2,049	1,026	1,929	1,295	565	861	881	546	946	1,692	807	1,008	980	662	1,322	813	661	937
Dec 2004	1,635	1,305	2,817	1,376	1,075	1,682	847	541	835	1,210	549	2,755	1,304	757	1,087	917	840	1,159	871	683	793
Jun 2005	1,978	1,235	3,559	1,490	1,074	1,943	859	545	716	1,158	602	2,907	1,503	775	670	1,097	572	1,187	923	702	770
Dec 2005	1,448	1,220	3,339	1,907	1,125	2,054	891	556	632	1,693	687	1,127	1,409	775	732	1,174	611	1,531	928	747	751
Jun 2006	2,003	1,177	2,763	1,744	1,086	1,847	959	570	583	1,741	757	1,285	1,581	736	901	1,459	660	2,240	1,001	757	718
Dec 2006	1,656	1,158	3,167	3,516	1,185	1,644	1,032	685	698	1,449	773	1,144	2,406	734	901	2,006	708	2,065	1,404	765	863
Jun 2007	1,144	1,159	3,563	2,011	1,208	1,598	1,467	851	697	2,149	823	951	4,351	785	1,103	1,737	829	2,426	1,132	794	940
Dec 2007	1,811	1,158	3,137	1,737	1,248	1,498	1,759	779	798	2,995	904	1,409	1,893	822	1,716	1,852	857	2,531	1,289	844	1,745
Jun 2008	1,783	1,097	3,661	1,329	1,282	1,709	1,849	683	888	2,896	965	1,731	1,837	820	3,196	1,801	946	2,344	1,232	891	1,944
Dec 2008	1,554	1,707	3,428	1,605	1,355	1,487	1,110	703	868	3,056	983	1,862	3,690	999	1,964	1,593	841	1,584	1,566	940	2,253
Jun 2009	1,590	1,601	3,013	2,138	1,274	1,393	1,502	799	988	2,611	952	1,858	2,786	1,084	1,507	1,812	1,009	1,960	1,300	1,208	2,092
Dec 2009	2,333	1,343	3,572	1,413	1,342	1,210	1,521	781	1,086	3,239	944	1,919	2,913	1,037	1,351	2,300	878	3,486	1,750	1,130	1,983
Jun 2010	1,791	1,188	3,611	2,059	1,397	1,112	1,049	748	938	1,975	1,148	1,744	3,051	937	1,040	1,707	875	3,453	1,334	1,112	1,550
Dec 2010	2,597	1,014	3,653	2,082	1,473	1,316	1,874	720	1,009	3,433	952	2,153	3,737	835	1,426	1,814	726	3,781	1,321	1,015	1,408
Jun 2011	2,581	753	1,961	2,000	1,412	1,705	771	669	759	1,197	976	1,232	4,373	868	899	1,253	813	3,012	936	921	942
Dec 2011	3,059	740	1,888	1,729	1,445	1,687	720	642	627	1,048	947	1,192	4,383	884	957	1,189	840	2,794	911	875	932
Jun 2012	1,945	778	2,381	1,652	1,703	1,523	736	656	682	1,035	954	1,211	3,413	850	944	1,347	895	3,192	1,053	857	933
Dec 2012	1,125	806	2,500	1,657	1,732	1,607	725	662	716	969	943	1,086	1,202	789	844	1,076	929	2,520	1,126	813	897
Jun 2013	1,335	758	2,230	1,560	1,631	1,879	670	619	716	1,026	907	1,112	1,360	707	778	1,000	1,016	4,939	947	720	858

¹ Reporters (reporting dealers) are defined as those institutions whose head office is located in one of the 13 reporting countries and which participate in the semiannual OTC derivatives market statistics; in addition, reporting dealers include all branches and subsidiaries of these entities worldwide; reporting dealers will mainly be commercial and investment banks and securities houses, including their branches and subsidiaries and other entities which are active dealers. ² Forward rate agreements. ³ Interest rate swaps. ⁴ Interest rate options.

Table 9h

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

Period	Forwards, forex swaps and currency swaps	Options
Jun 2000	438	566
Dec 2000	444	576
Jun 2001	453	646
Dec 2001	516	675
Jun 2002	469	638
Dec 2002	468	603
Jun 2003	460	592
Dec 2003	443	995
Jun 2004	445	670
Dec 2004	476	656
Jun 2005	454	672
Dec 2005	461	645
Jun 2006	475	659
Dec 2006	484	635
Jun 2007	492	632
Dec 2007	533	673
Jun 2008	531	744
Dec 2008	563	691
Jun 2009	630	769
Dec 2009	627	811
Jun 2010	690	936
Dec 2010	643	897
Jun 2011	570	684
Dec 2011	531	694
Jun 2012	541	752
Dec 2012	564	853
Jun 2013	559	1,013

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Table 9i

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

	Europe		Japan		Latin America		Other Asia		United States	
	Forwards and swaps	Options	Forwards and swaps	Options	Forwards and swaps	Options	Forwards and swaps	Options	Forwards and swaps	Options
Jun 2000	706	743	2,616	1,822	6,919	7,794	3,734	1,346	1,290	884
Dec 2000	841	1,312	2,359	918	5,051	6,875	1,645	1,702	1,228	1,023
Jun 2001	733	1,962	1,924	1,412	5,524	4,945	1,848	1,146	1,321	851
Dec 2001	831	1,541	2,494	1,108	6,324	8,829	1,676	1,352	1,288	955
Jun 2002	824	2,235	2,059	1,096	7,932	8,324	2,256	1,059	1,390	1,212
Dec 2002	947	1,327	2,458	2,110	7,526	9,561	2,088	2,443	1,229	812
Jun 2003	984	1,788	2,910	2,132	8,863	9,622	1,273	2,454	1,265	809
Dec 2003	857	1,863	5,520	1,988	4,353	7,604	1,485	6,074	1,419	1,457
Jun 2004	879	2,227	3,114	4,446	3,839	6,678	1,536	6,013	1,276	1,063
Dec 2004	767	852	2,165	1,810	6,352	4,534	1,282	2,275	1,242	1,282
Jun 2005	837	794	2,330	1,583	7,270	4,623	1,313	1,616	929	852
Dec 2005	767	814	3,014	2,080	7,122	5,481	1,431	6,399	1,187	962
Jun 2006	803	721	1,942	3,099	6,857	3,971	1,240	7,619	1,234	1,612
Dec 2006	748	1,140	1,645	4,896	7,330	3,953	1,189	7,309	1,709	896
Jun 2007	822	1,073	1,582	4,599	8,167	3,842	1,549	1,513	1,415	924
Dec 2007	603	965	1,316	2,197	7,603	4,486	1,483	5,165	1,028	861
Jun 2008	949	918	1,217	1,786	6,809	6,527	1,207	1,841	1,014	836
Dec 2008	729	1,066	1,038	2,688	4,747	5,063	1,091	1,262	825	1,053
Jun 2009	872	1,325	1,304	2,984	5,335	6,404	962	1,254	848	1,571
Dec 2009	805	1,447	1,051	2,115	3,754	4,178	1,209	1,233	862	2,361
Jun 2010	910	1,325	993	2,515	5,009	6,478	1,329	1,224	1,142	2,019
Dec 2010	873	990	936	2,231	6,254	2,807	2,209	1,074	897	1,344
Jun 2011	745	995	1,308	2,579	2,329	2,863	1,476	1,045	986	1,770
Dec 2011	702	926	978	3,533	3,461	3,983	1,364	1,183	849	917
Jun 2012	773	895	867	3,702	2,806	3,841	1,334	1,173	899	992
Dec 2012	729	1,082	938	2,503	4,915	4,392	1,266	1,384	952	987
Jun 2013	751	1,034	977	2,455	5,067	3,917	1,295	1,276	856	905

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