

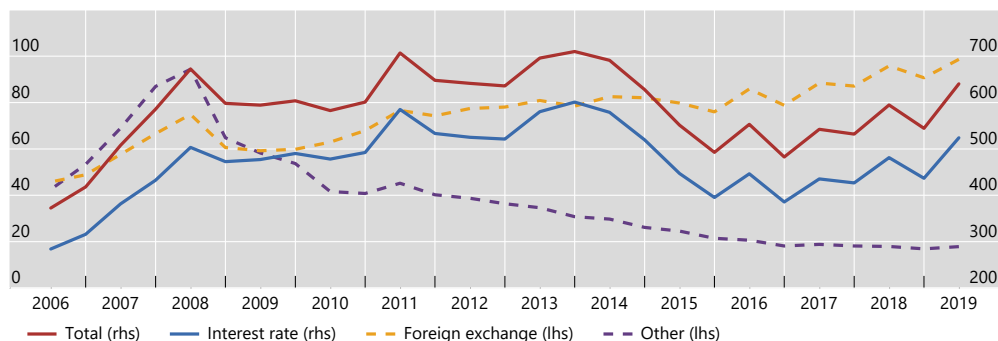


8 November 2019

Statistical release: OTC derivatives statistics at end-June 2019

- Notional amounts of OTC derivatives rose to [\\$640 trillion](#) at end-June 2019. This is up from \$544 trillion at end-2018 and the highest level since 2014. It marks a continuation of the trend increase evident since end-2016.
- The gross market value of OTC derivatives, summing positive and negative values, also rose, from \$9.7 trillion to [\\$12.1 trillion](#), led by increases in euro interest rate derivative contracts.
- The latest semiannual data benefit from the addition of more comprehensive information for smaller dealers collected as part of the BIS Triennial Survey.¹ Dealers in emerging market economies (EMEs) accounted for 9% of the outstanding notional amounts of foreign exchange and commodity derivatives globally at end-June 2019, up from 7% at end-June 2016.

Outstanding notional amounts of OTC derivatives trend upwards



Graph 1: Outstanding notional amounts of OTC derivatives, USD trillions ([interactive graph](#)).
Source: BIS OTC derivatives statistics ([Table D5.1](#)).

[Notional amounts](#) – which determine contractual payments – rose significantly in the first half of this year, to [\\$640 trillion](#) at end-June 2019 (Graph 1, red line). Part of this increase reflects a seasonal pattern evident in the data since 2016. Specifically, notional amounts outstanding have tended to decrease in the second half of a year, followed by a rebound in the first, generating the sawtooth pattern seen in Graph 1. Factoring out that pattern, notional amounts have grown year on year by around 7% on average since end-2017,² and have now reached their highest level since 2014.

¹ The latest Triennial Survey captures data from smaller dealers in emerging market economies and elsewhere, with those data being used to scale up the semiannual data to more accurately reflect the global OTC derivatives market.

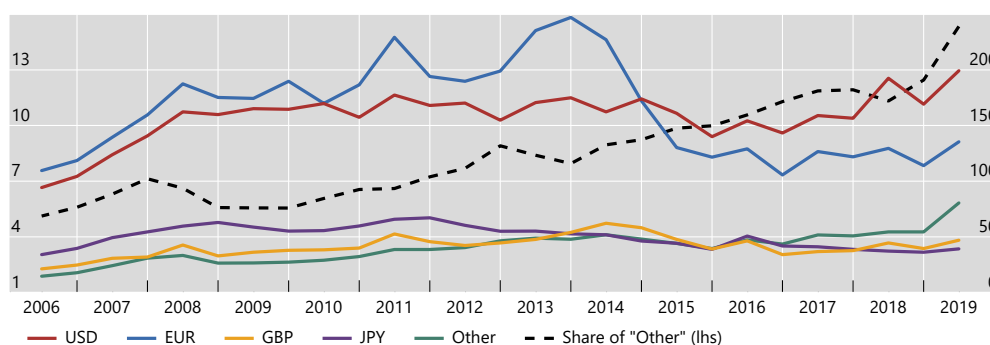
² End-December data show the same trend, going from \$482 trillion at end-2016 to \$532 trillion at end-2017 to \$544 trillion at end-2018.

Interest rate derivatives accounted for the bulk of OTC notional amounts outstanding at end-June 2019 (\$524 trillion or 82%), and have driven the upward trend evident since 2016 (Graph 1, blue line). This upward trend contrasts with the significant contraction observed in 2014 and 2015.

Notional amounts outstanding for foreign exchange derivatives, which had not experienced a similar downward correction in the early 2010s, have also been trending upwards in recent years (Graph 1, yellow dashed line); their notional amounts totalled \$99 trillion at end-June 2019.

In contrast, notional amounts of other derivatives³ have followed a trend decline since the financial crisis of 2007–09 (Graph 1, purple dashed line). This trend was driven almost entirely by credit derivatives, of which 93% were credit default swaps at end-June 2019.

Notional rise driven by USD interest rate derivatives



Graph 2: Outstanding notional amounts of OTC interest rate derivatives, USD trillions ([interactive graph](#)). “Other” refers to contracts denominated in currencies other than USD, EUR, JPY, GBP, CHF, CAD and SEK.

Source: BIS OTC derivatives statistics ([Table D7](#)).

Notional amounts of US dollar-denominated interest rate contracts rose in the first half of 2019, continuing the trend expansion observed since 2016 (Graph 2, red line). They have become the largest currency segment in the past few years, rising from \$169 trillion at end-2018 to **\$199 trillion** at end-June 2019, a new peak.

Euro-denominated interest rate contracts also rose in the first half of 2019, from \$114 trillion to **\$135 trillion** (Graph 2, blue line). They appear to have broadly stabilised since 2015, at levels well below (by some 50%) the record amounts observed in 2010–14. These contracts drove the large decline in 2014–15. Notional amounts in the yen and sterling have remained at low levels, ie \$47 trillion for the former (yellow line) and \$39 trillion for the latter (purple line).

Interest rate contracts denominated in currencies other than the seven required reporting currencies (USD, EUR, GBP, JPY, CHF, CAD and SEK) have been increasing in recent years (Graph 2, green line).⁴ Contracts in the other currencies amounted to

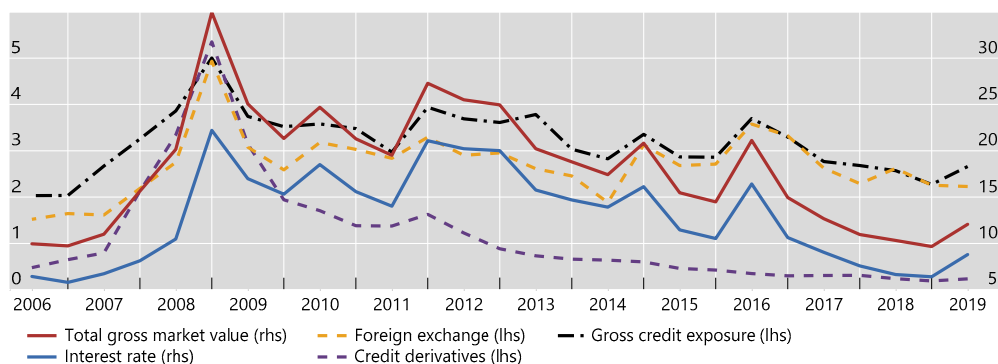
³ Other derivatives comprise credit, equity and commodity contracts as well as other minor instruments.

⁴ These other currencies feature more prominently in the more comprehensive data collected every three years as part of the BIS Triennial Survey. Data collected in the Triennial Survey are used to scale up volumes collected in the semiannual surveys.

\$47 trillion at end-June 2016, but rose to \$80 trillion at end-June 2019, with their share in total interest rate contracts going up from 11% to 15% (dashed line).

The overall increase in notional amounts was common across both short- and long-maturity contracts. Contracts of up to and including one year, accounting for 48% of outstanding notional amounts, rose from \$201 trillion at end-2018 to [\\$253 trillion](#) at end-June 2019. Contracts of longer than one year increased from \$236 to \$271 trillion.

Trend decline in gross market values halts



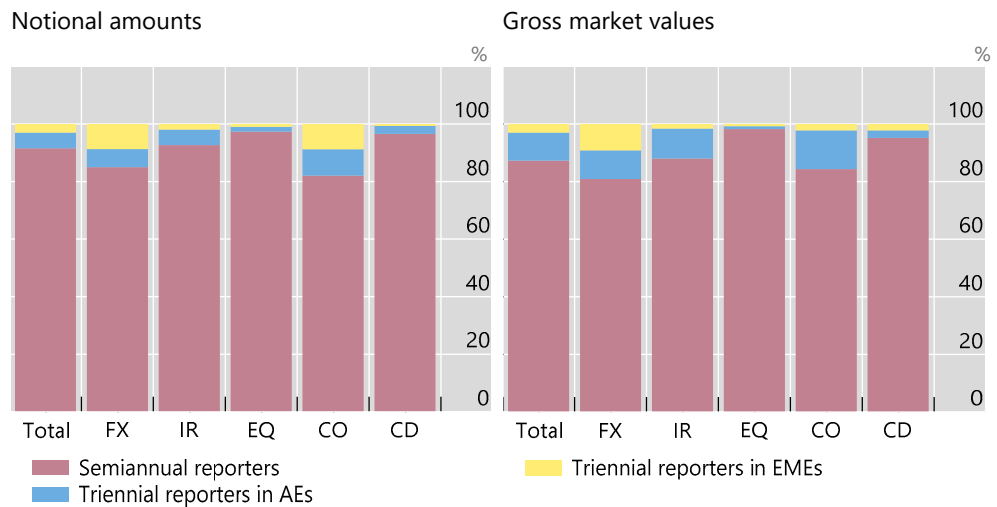
Graph 3: Outstanding gross market values of OTC derivatives, by instrument; and outstanding gross credit exposures, USD trillions ([interactive graph](#)).

Source: BIS OTC derivatives statistics ([Table D5.1](#)).

The trend decline in the [gross market value](#) of derivative contracts – which provides a measure of amounts at risk – appears to have come to a halt in the first half of 2019 (Graph 3, red line). It increased slightly, from \$9.7 trillion at end-2018 to [\\$12.1 trillion](#) at end-June 2019. This was driven entirely by interest rate contracts (blue line), in particular euro-denominated contracts (which rose from \$3.1 trillion to \$4.4 trillion). US dollar-denominated interest rate contracts also rose, from \$1.2 trillion to \$1.7 trillion. The gross market value of both foreign exchange and credit derivatives remained relatively stable, standing at \$2.2 trillion and \$0.2 trillion, respectively, at end-June 2019 (yellow and purple dashed lines).

[Gross credit exposures](#) (Graph 3, black dashed line), which adjust gross market values for legally enforceable bilateral netting agreements (but not for collateral), also rose for the first time since end-June 2016 (from \$2.3 trillion at end-2018 to [\\$2.7 trillion](#) at end-June 2019). Despite that slight increase, gross credit exposures declined as a share of gross market value over the same period, from 24% to 22% (Graph A1, right-hand panel).

Larger role for EME dealers in foreign exchange and commodities



Graph 4: OTC derivatives, by measure and instrument, percent of total, end-June 2019. CD = credit derivatives; CO = commodity derivatives; EQ = equity-linked derivatives; FX = foreign exchange derivatives; IR = single currency interest rate derivatives.

Source: BIS OTC derivatives statistics; BIS calculations.

The derivatives statistics published by the BIS on a semiannual basis capture the outstanding derivatives positions of 70 large banks and other dealers in 12 jurisdictions. This information is complemented every three years by the more comprehensive BIS Triennial Survey, which covers more than 30 additional jurisdictions and over 300 additional dealers.⁵ This latest Triennial Survey was completed this year, and the data captured by it are used to scale up the semiannual data to more accurately reflect the global size and composition of OTC derivatives markets.

Large dealers in advanced economies (AEs), who report data to the semiannual survey, accounted for the overwhelming majority (92% of notional amounts, 87% of gross market value) of outstanding positions at end-June 2019 (Graph 4). Nevertheless, the contribution of the smaller dealers who report data only once every three years was significant in some segments. Dealers in EMEs accounted for 9% of notional amounts of outstanding foreign exchange and commodity derivatives, up from 7% at end-June 2016. This reflects the importance of exchange rate risk and commodity price movements for EMEs.

⁵ These additional dealers include smaller dealers located in the 12 jurisdictions that report data on a semiannual basis.

Annex: Charts

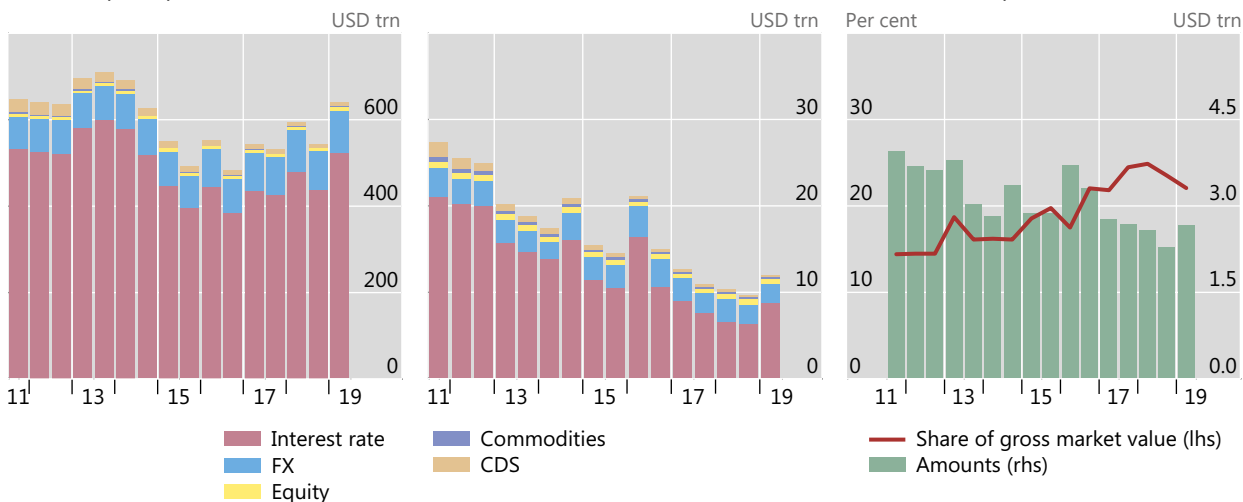
Global OTC derivatives markets

Graph A1

Notional principal¹

Gross market value¹

Gross credit exposure¹



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

Source: BIS OTC derivatives statistics (available at www.bis.org/statistics/derstats.htm).

OTC foreign exchange derivatives

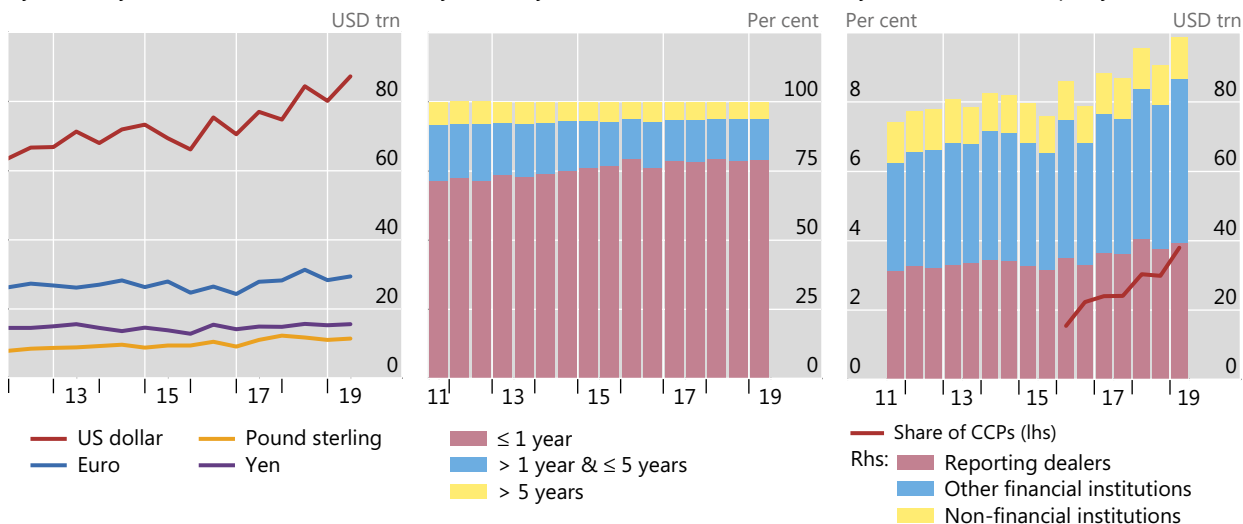
Notional principal¹

Graph A2

By currency

By maturity

By sector of counterparty



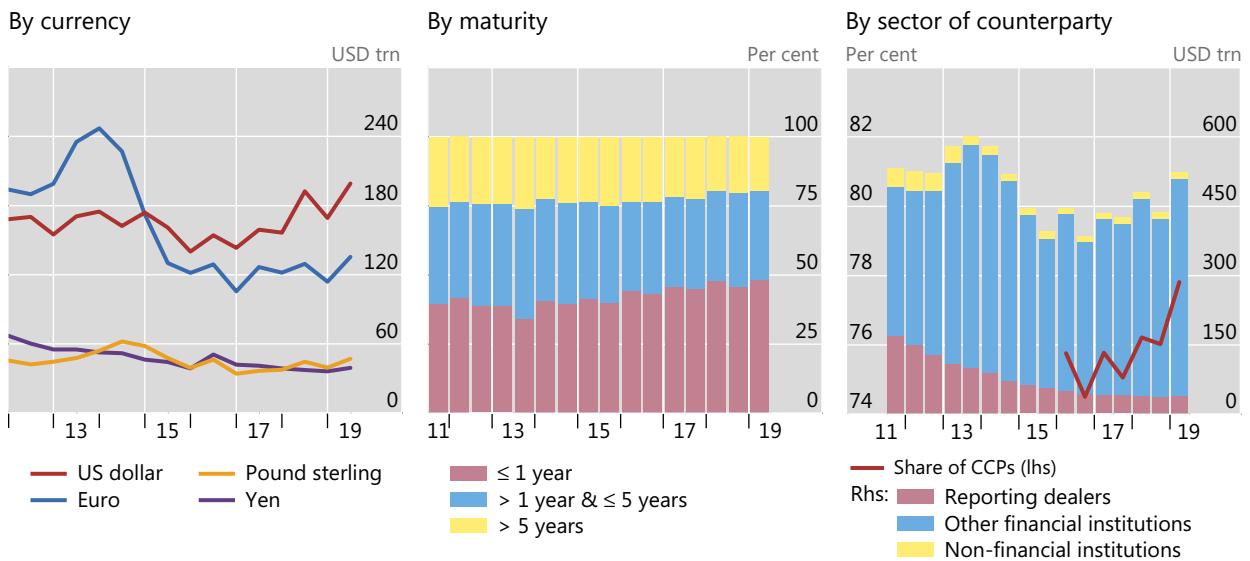
¹ At half-year end (end-June and end-December). Amounts denominated in currencies other than the US dollar are converted to US dollars at the exchange rate prevailing on the reference date.

Source: BIS OTC derivatives statistics (available at www.bis.org/statistics/derstats.htm).

OTC interest rate derivatives

Notional principal¹

Graph A3



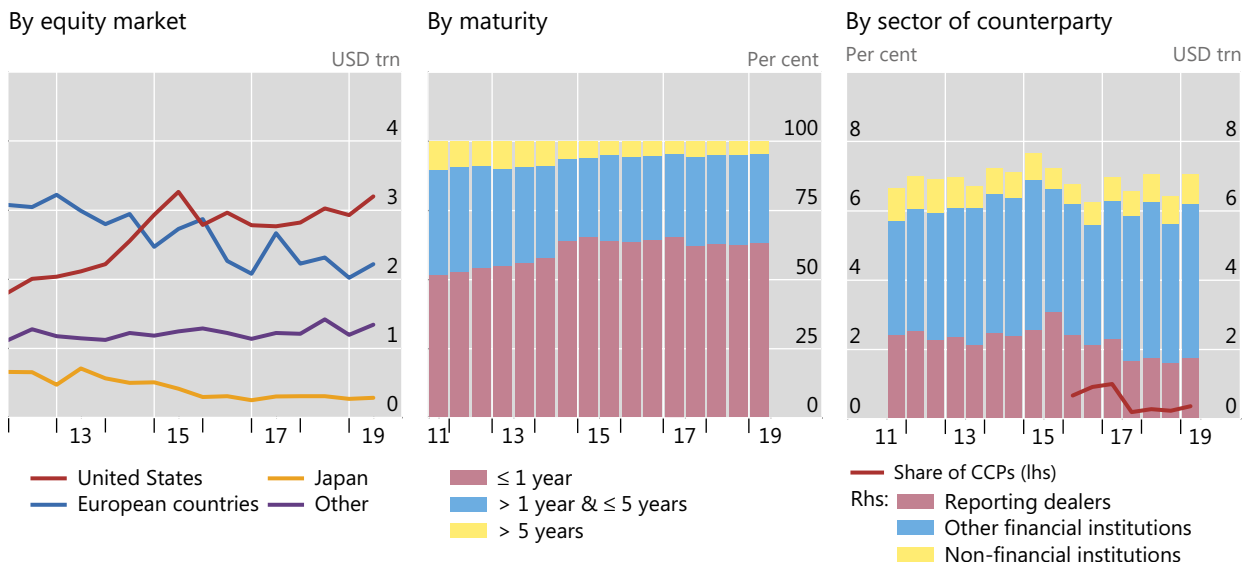
¹ At half-year end (end-June and end-December). Amounts denominated in currencies other than the US dollar are converted to US dollars at the exchange rate prevailing on the reference date.

Source: BIS OTC derivatives statistics (available at www.bis.org/statistics/derstats.htm).

OTC equity-linked derivatives

Notional principal¹

Graph A4

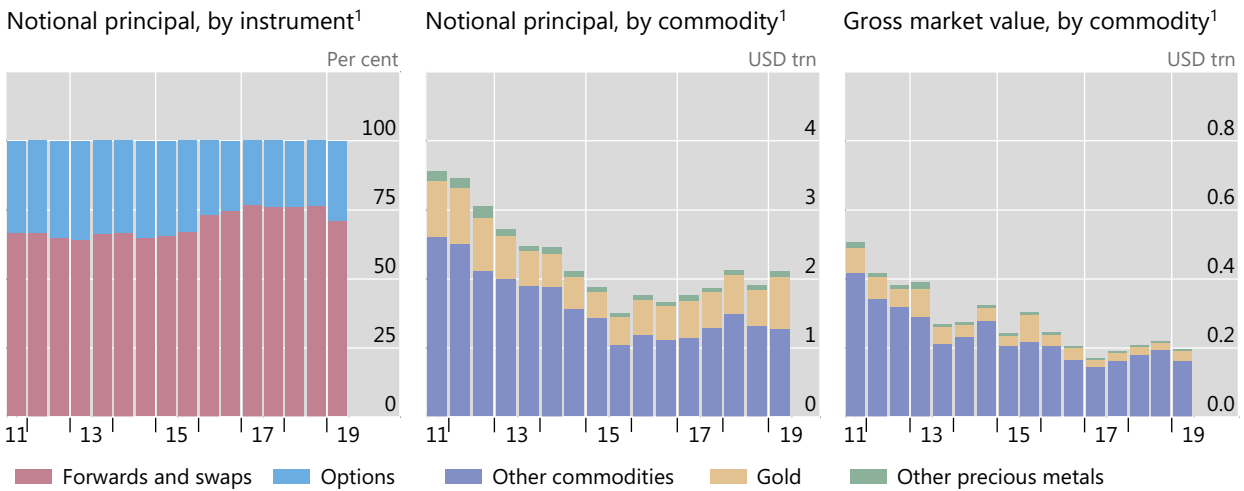


¹ At half-year end (end-June and end-December). Amounts denominated in currencies other than the US dollar are converted to US dollars at the exchange rate prevailing on the reference date.

Source: BIS OTC derivatives statistics (available at www.bis.org/statistics/derstats.htm).

OTC commodity derivatives

Graph A5

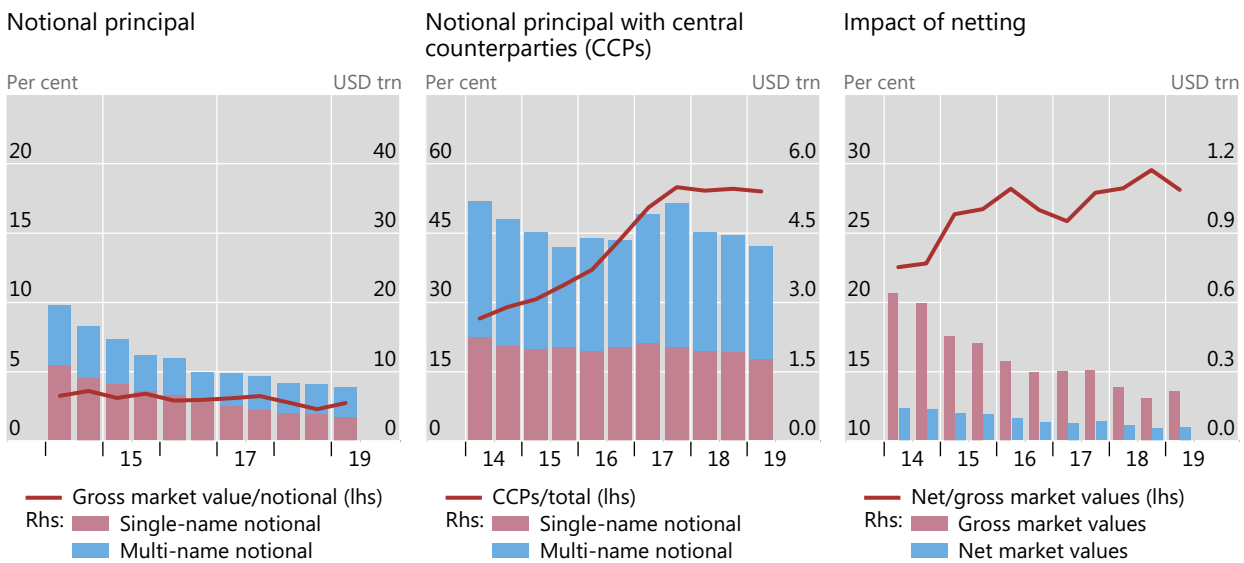


¹ At half-year end (end-June and end-December). Amounts denominated in currencies other than the US dollar are converted to US dollars at the exchange rate prevailing on the reference date.

Source: BIS OTC derivatives statistics (available at www.bis.org/statistics/derstats.htm).

Credit default swaps¹

Graph A6



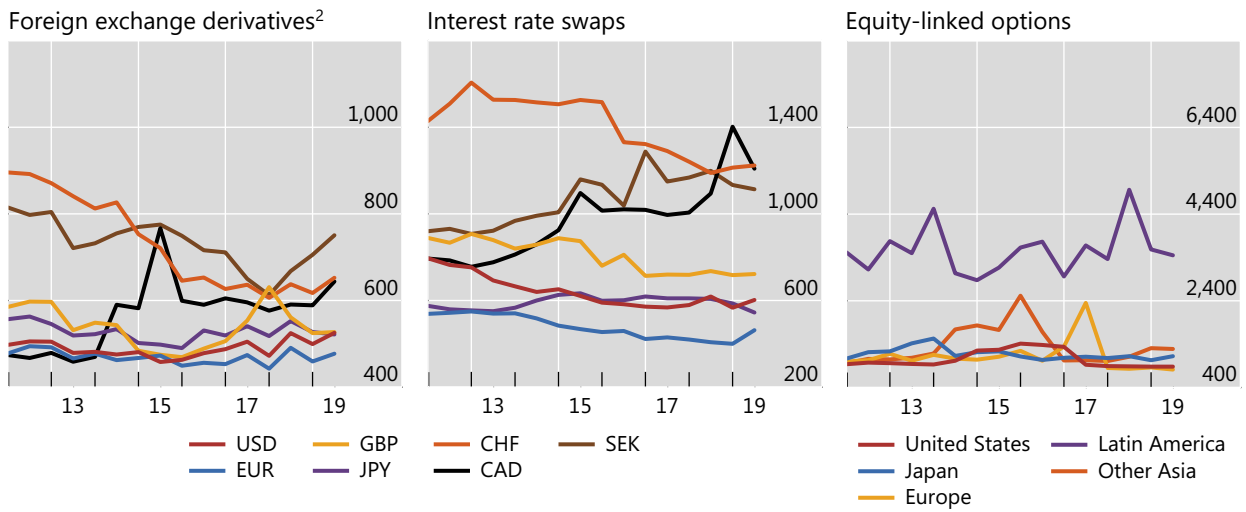
¹ At half-year end (end-June and end-December). Amounts denominated in currencies other than the US dollar are converted to US dollars at the exchange rate prevailing on the reference date.

Source: BIS OTC derivatives statistics (available at www.bis.org/statistics/derstats.htm).

Concentration in global OTC derivatives markets

Herfindahl index¹

Graph A7



CAD = Canadian dollar; CHF = Swiss franc; EUR = euro; GBP = pound sterling; JPY = Japanese yen; SEK = Swedish krona; USD = US dollar.

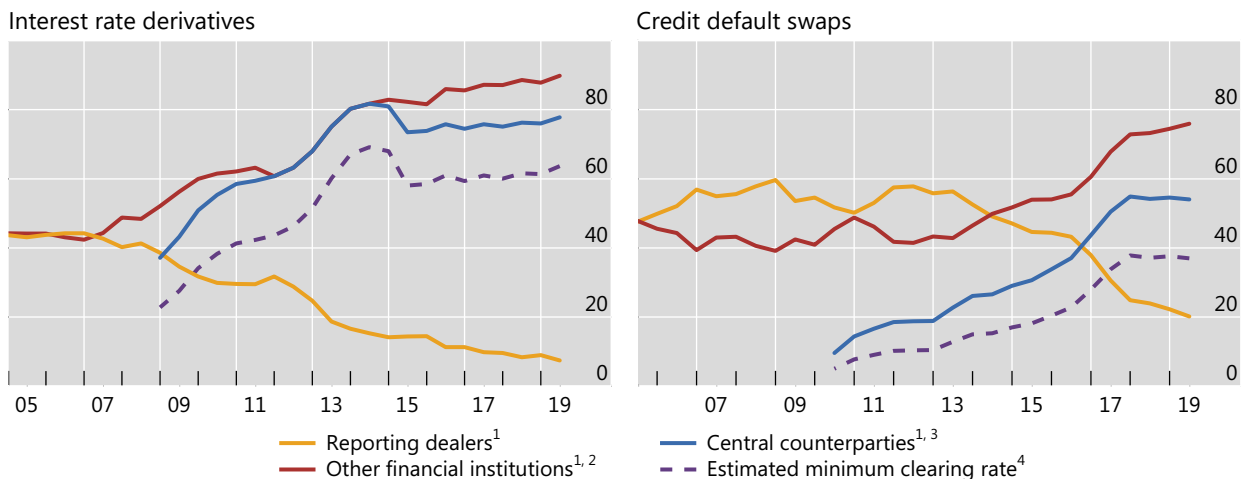
¹ The index ranges from 0 to 10,000, where a lower number indicates that there are many dealers with similar market shares (as measured by notional principal) and a higher number indicates that the market is dominated by a few reporting dealers. ² Foreign exchange forwards, foreign exchange swaps and currency swaps.

Source: BIS OTC derivatives statistics (available at www.bis.org/statistics/derstats.htm).

Growth of central clearing

Notional amounts outstanding by counterparty, in per cent

Graph A8



¹ As a percentage of notional amounts outstanding against all counterparties. ² Including central counterparties but excluding reporting dealers. ³ For interest rate derivatives, data for CCPs prior to end-June 2016 are estimated by indexing the amounts reported at end-June 2016 to the growth since 2008 of notional amounts outstanding cleared through LCH's SwapClear service. ⁴ Proportion of trades that are cleared, estimated as $(CCP / 2) / (1 - (CCP / 2))$, where CCP represents the share of notional amounts outstanding that dealers report against CCPs. CCPs' share is halved to adjust for the potential double-counting of inter-dealer trades novated to CCPs.

Sources: LCH.Clearnet Group Ltd; BIS OTC derivatives statistics (Table D7 and Table D10.1); BIS calculations.