

## OTC derivatives statistics at end-June 2024

- The value of outstanding derivatives (notional amounts) grew by 2% year on year (yoy) at end-June 2024. Amounts fell by 6% in the second half of 2023 and increased by 9% in the first half of 2024, in keeping with a seasonal saw-tooth pattern.
- The notional value of foreign exchange (FX) swaps and forwards rose in the first half of 2024. Contracts with the yen on one side saw particularly strong growth (13% yoy in dollar terms and 26% in yen terms).
- The notional value of interest rate derivatives remained flat, but their gross market value declined for a third consecutive reporting period, by 17% yoy.
- The value of “Other commodities” (notional amounts), which include oil derivatives, expanded in the first half of 2024, pushing yoy growth to 18%.

## Outstanding OTC derivatives rise year on year

The overall *notional* value of outstanding over-the-counter (OTC) derivatives continued its upward trajectory. After contracting by 6% in the second half of 2023, amounts grew by 9% in the first half of 2024 to end up 2% (or \$17 trillion) higher yoy. This semi-annual saw-tooth pattern is a result of seasonal factors whereby outstanding amounts decrease temporarily before the end of each calendar year.<sup>1</sup>

Across risk categories, growth rates varied in the latest period. FX derivatives grew by a rapid 10% yoy to reach \$130 trillion, with the increase occurring entirely in the first half of 2024. For their part, credit derivatives declined by 9% yoy to \$9.2 trillion, while commodities and equity-linked derivatives rose noticeably (Graph 1.B). Interest rate derivatives (IRDs), the largest component of the global aggregate, rose by only 1% yoy to \$579 trillion.

The gross *market* value of OTC derivatives (summing positive and negative market values) continued its decline from December 2022. It fell by 13% during 2023 and then by 7% in the first half of 2024 (Graph 1.C, red line). This was mainly driven by the IRD component, which continued its descent from end-2022 (Graph 1.C, yellow line). The elevated market values in 2022 coincided with a rapid tightening of dollar interest rates, which boosted the market values of outstanding contracts.<sup>2</sup> As the pace

<sup>1</sup> Such contractions can occur if reporting dealers shrink their outstanding notional derivative positions for regulatory and financial reporting purposes. Possible factors behind such effects were analysed in [OTC derivatives statistics at end-December 2019 \(bis.org\)](#). The Basel Committee on Banking Supervision identified such practices in its 7 March 2024 call for comments on “measures to address window-dressing in the G-SIB framework” ([www.bis.org/press/p240307.htm](http://www.bis.org/press/p240307.htm)).

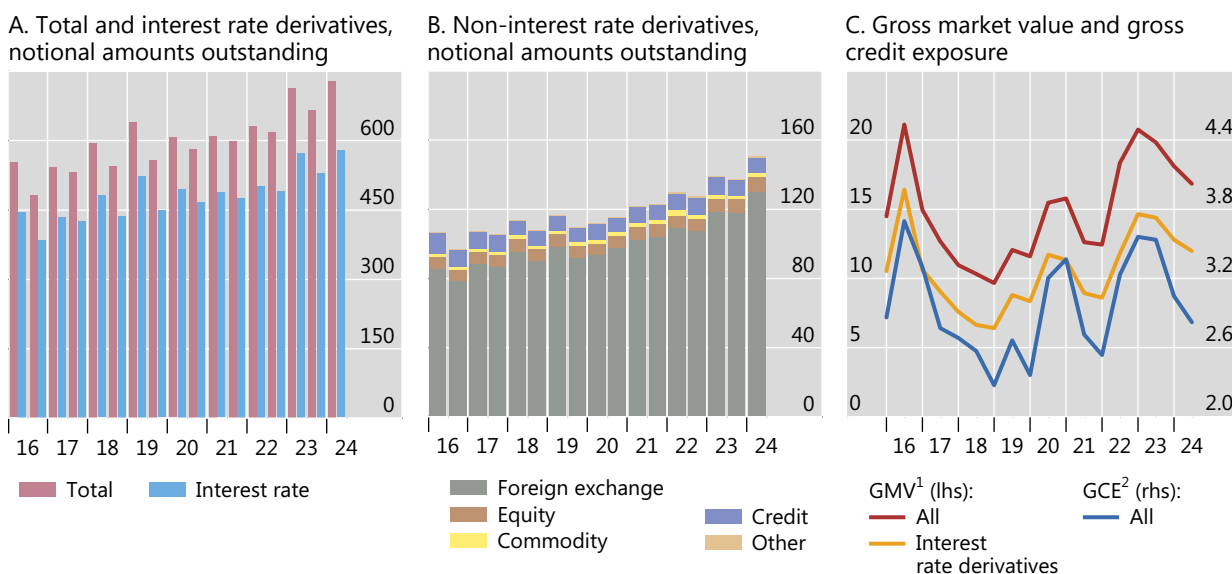
<sup>2</sup> The Federal Reserve raised the dollar interest rate four times in 2023 but held rates steady in the first half of 2024. The ECB lowered the euro rate in June 2024 after having raised the rate six times in 2023. (See [Effective Federal Funds Rate \(newyorkfed.org\)](#) and [Key ECB interest rates \(europa.eu\)](#)).

of tightening slowed in 2023, the market value of IRD started to decrease.<sup>3</sup> Gross credit exposures, which adjust gross market values for legally enforceable bilateral netting agreements (but not for collateral), also continued their decline since December 2022 – down by 7% in the first half of 2024 – and they also declined as a share of market value.

## Outstanding OTC derivatives

In trillions of US dollars

Graph 1



<sup>1</sup> Gross market value. <sup>2</sup> Gross credit exposure.

Source: BIS OTC derivatives statistics (Tables D5.1 and D5.2).

The rise in the notional value of FX derivatives was driven mainly by greater positions in FX swaps and forwards (Graph 2.A). Contracts involving the yen on one side had trended upwards throughout 2023 and rose particularly strongly in the first half of 2024. Positions grew by 13% yoy in dollar terms (Graph 2.B, purple line) and by 26% when expressed in yen (Graph 2.C, purple line).<sup>4</sup> This came on the back of a depreciating yen and growing market speculation regarding Japan’s emergence from a negative interest rate environment. The volatility of the yen exchange rate is reflected in the growing notional amounts of yen forwards and swaps outstanding since 2020 (Graph 2.C). The strongest growth was with counterparties classified as “other financial institutions”, which include non-reporting banks and non-bank financial institutions. Contracts involving “other currencies” (ie those not explicitly broken out in the data) have also trended upwards since end-2022 (Graph 2.A, orange line); the most recent rise left the yoy growth rate unchanged near 10% (Graph 2.B).

<sup>3</sup> Similarly, the gross credit exposure measure – which adjusts gross market values for legally enforceable bilateral netting agreements (but not for collateral) – decreased by 7% in the first half of 2024 to \$2.8 trillion (Graph 1.C, blue line).

<sup>4</sup> The end-June data do not capture changes in outstanding positions that may have occurred during the market disruptions in August 2024.

Mirroring these moves was a rise in contracts involving the US dollar (Graph 2.A, red line), given its role as the vehicle currency in FX derivatives.

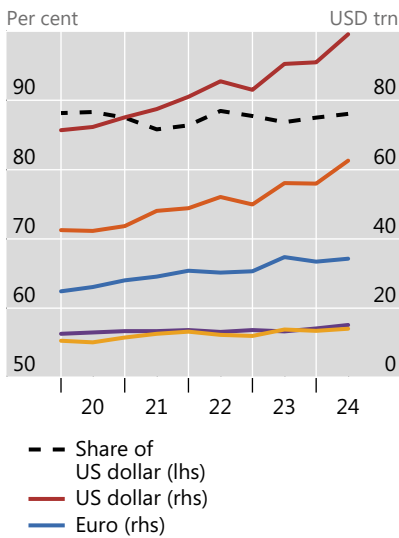
The most robust growth occurred in the smaller segments of the derivatives market. Geopolitical tensions in early 2024 (eg disrupted oil flows through the Red Sea) went hand in hand with risk hedging in oil derivatives.<sup>5</sup> The derivatives segment “other commodities”, which includes oil derivatives, grew by 21% in the first half of 2024. This was the first outsize movement in outstanding amounts since the first half of 2022, which coincided with the start of the war in Ukraine.

## FX forwards and swaps

By currency, notional amounts outstanding

Graph 2

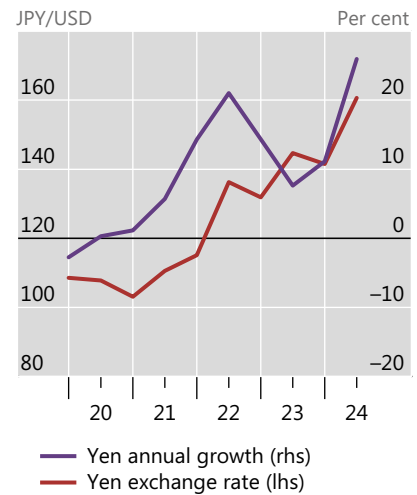
A. Notional amounts<sup>1,2</sup>



B. Annual growth rates<sup>2</sup>



C. Growth in yen forwards and swaps<sup>3</sup> and the exchange rate



<sup>1</sup> Currency distribution is presented on a 200% basis because currency pairs contribute to totals of both currencies in the pair. <sup>2</sup> Expressed in dollars. <sup>3</sup> Expressed in yen.

Source: BIS OTC derivatives statistics (Tables D5.1 and D9).

Bullish US equity markets during the first half of 2024 have coincided with greater positions in equity-linked derivatives. These grew by 12% to \$8.7 trillion in the first half of 2024, mainly driven by a 14% rise in positions with “other financial institutions” (Graph 3.B).

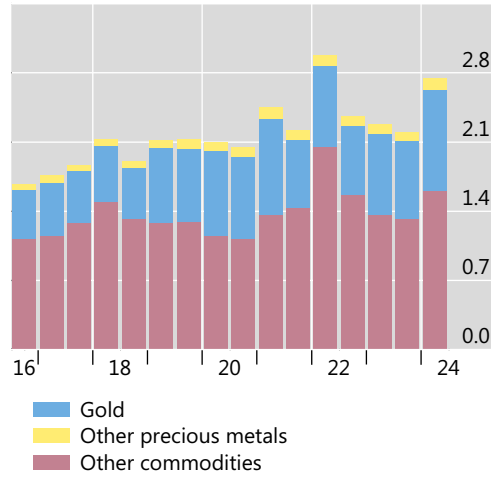
<sup>5</sup> Market commentary noted exceptionally strong derivatives activity in oil futures in January and February 2024 despite there being no outsize rise in oil prices. See A Longley, D K Kumar and Y Chin, “Oil traders are piling into a market that’s not going anywhere,” *Bloomberg*, 6 February 2024 ([www.bloomberg.com/news/articles/2024-02-06/oil-traders-are-piling-into-a-market-that-s-not-going-anywhere](http://www.bloomberg.com/news/articles/2024-02-06/oil-traders-are-piling-into-a-market-that-s-not-going-anywhere)).

# OTC commodity and equity-linked derivatives<sup>1</sup>

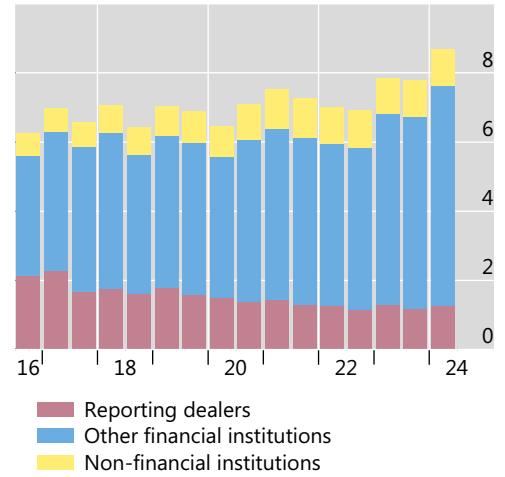
Notional amounts outstanding, in trillions of US dollars

Graph 3

A. Commodity derivatives



B. Equity-linked, by sector of counterparty



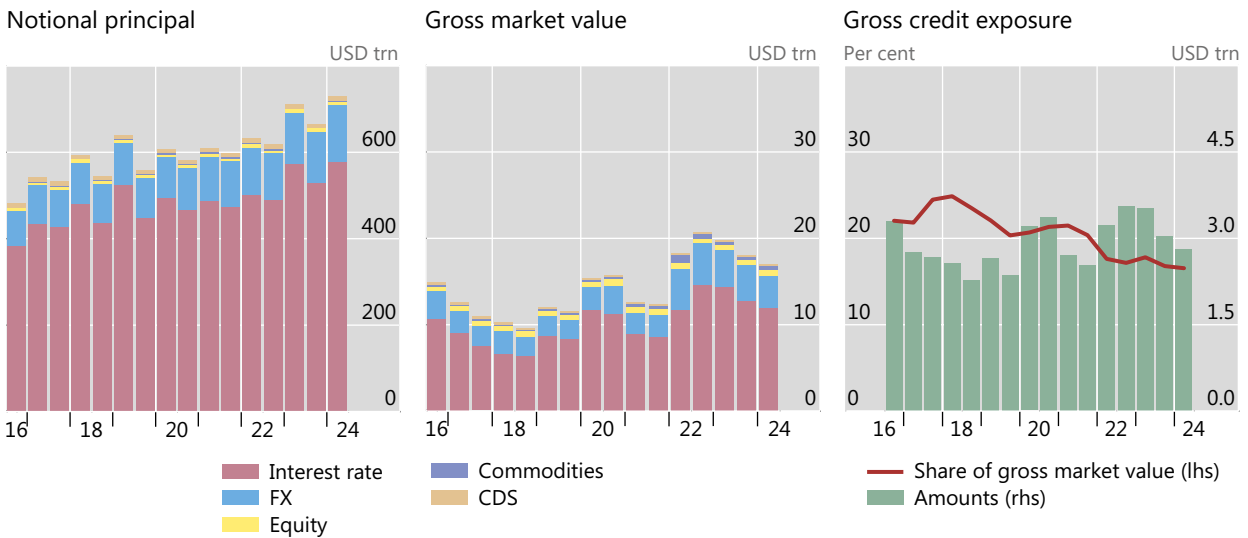
<sup>1</sup> At half-year end (end-June and end-December). Amounts denominated in currencies other than the US dollar are converted to US dollars at the exchange rate prevailing on the reference date.

Source: BIS OTC derivatives statistics (Tables D5.1 and D5.2).

## Annex

### Global OTC derivatives markets<sup>1</sup>

Graph A.1



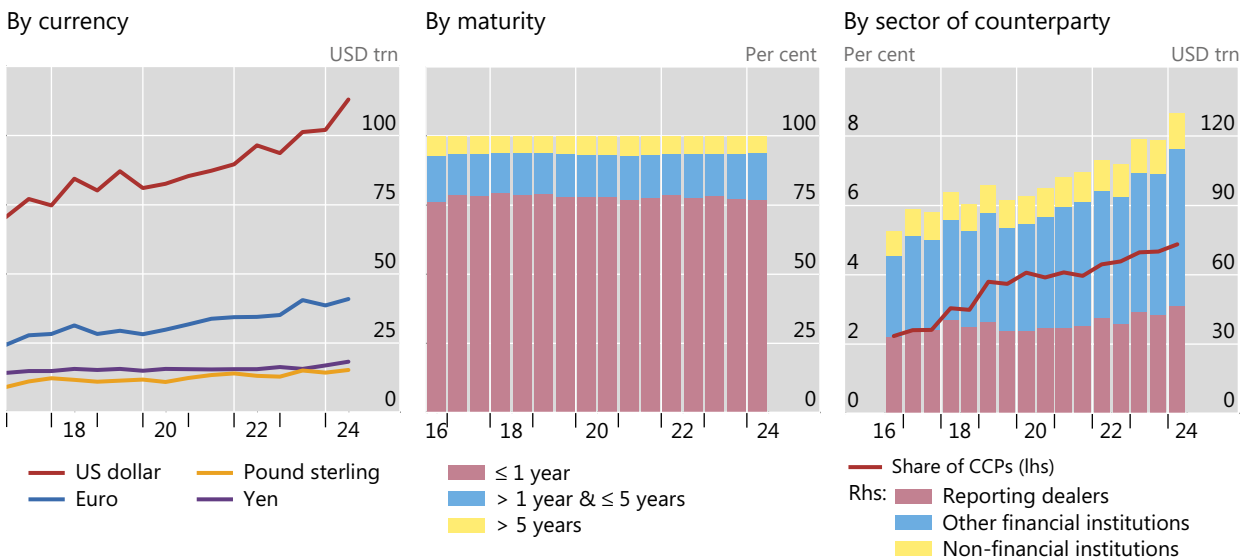
<sup>1</sup> At half-year end (end-June and end-December). Amounts denominated in currencies other than the US dollar are converted to US dollars at the exchange rate prevailing on the reference date.

Source: BIS OTC derivatives statistics.

### OTC foreign exchange derivatives<sup>1</sup>

#### Notional principal

Graph A.2



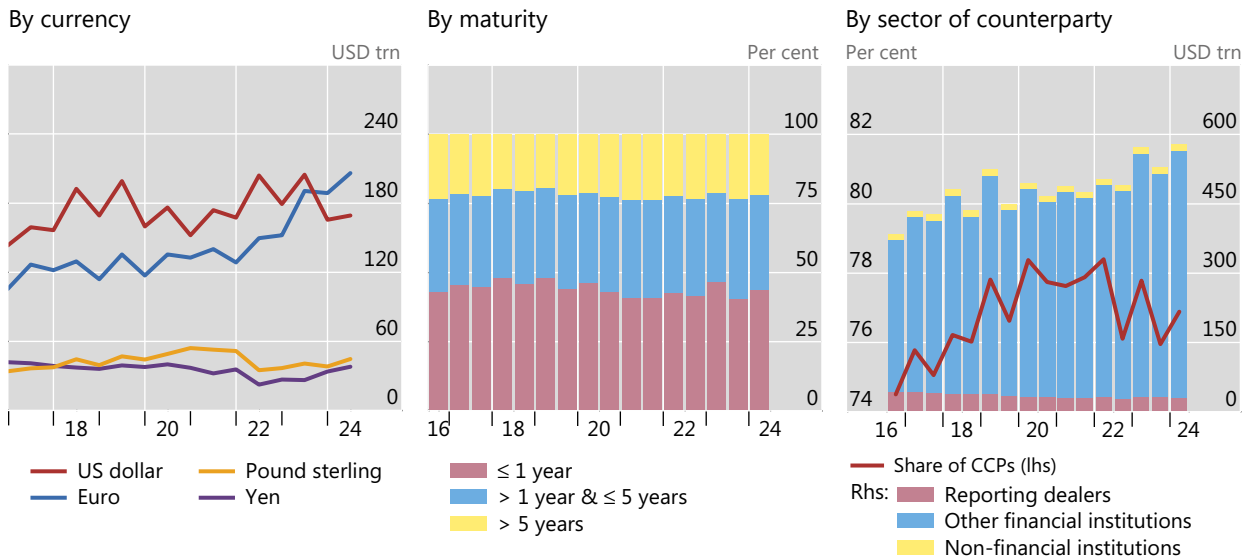
<sup>1</sup> At half-year end (end-June and end-December). Amounts denominated in currencies other than the US dollar are converted to US dollars at the exchange rate prevailing on the reference date.

Source: BIS OTC derivatives statistics.

## OTC interest rate derivatives<sup>1</sup>

Notional principal

Graph A.3



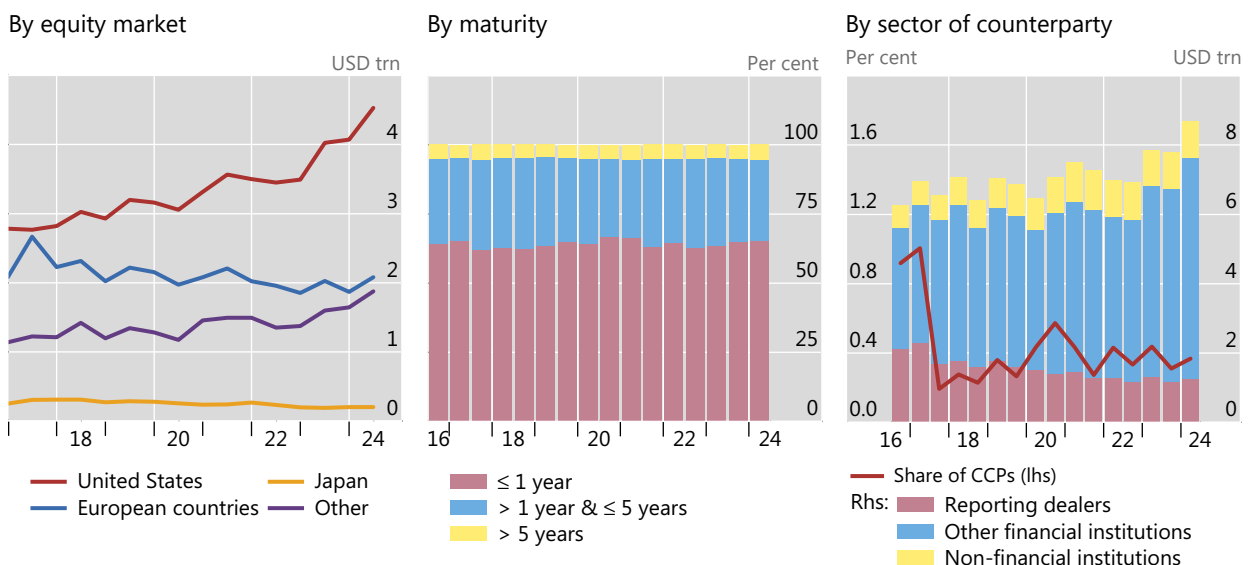
<sup>1</sup> At half-year end (end-June and end-December). Amounts denominated in currencies other than the US dollar are converted to US dollars at the exchange rate prevailing on the reference date.

Source: BIS OTC derivatives statistics.

## OTC equity-linked derivatives<sup>1</sup>

Notional principal

Graph A.4

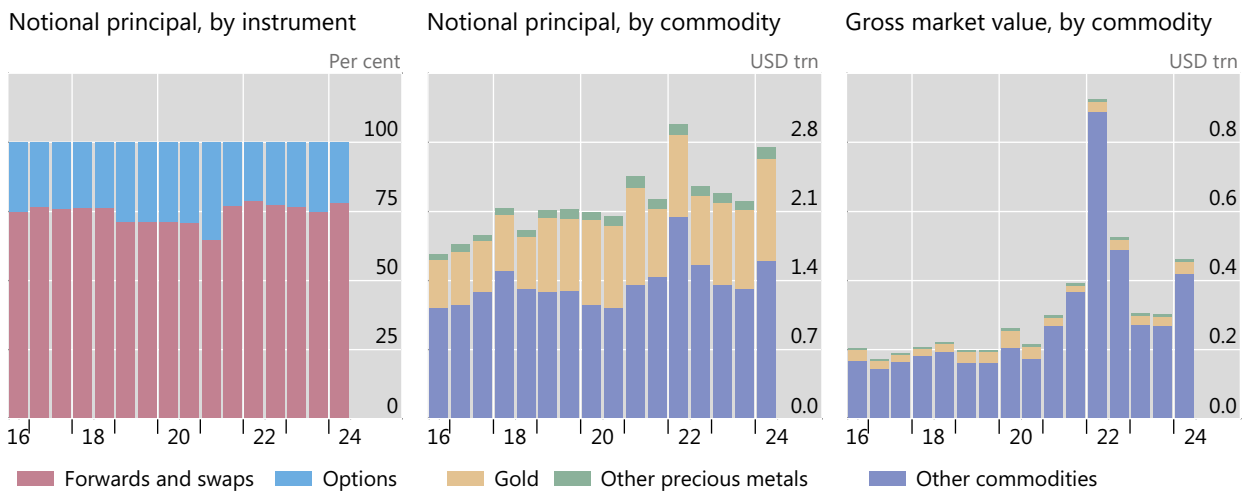


<sup>1</sup> At half-year end (end-June and end-December). Amounts denominated in currencies other than the US dollar are converted to US dollars at the exchange rate prevailing on the reference date.

Source: BIS OTC derivatives statistics.

## OTC commodity derivatives<sup>1</sup>

Graph A.5

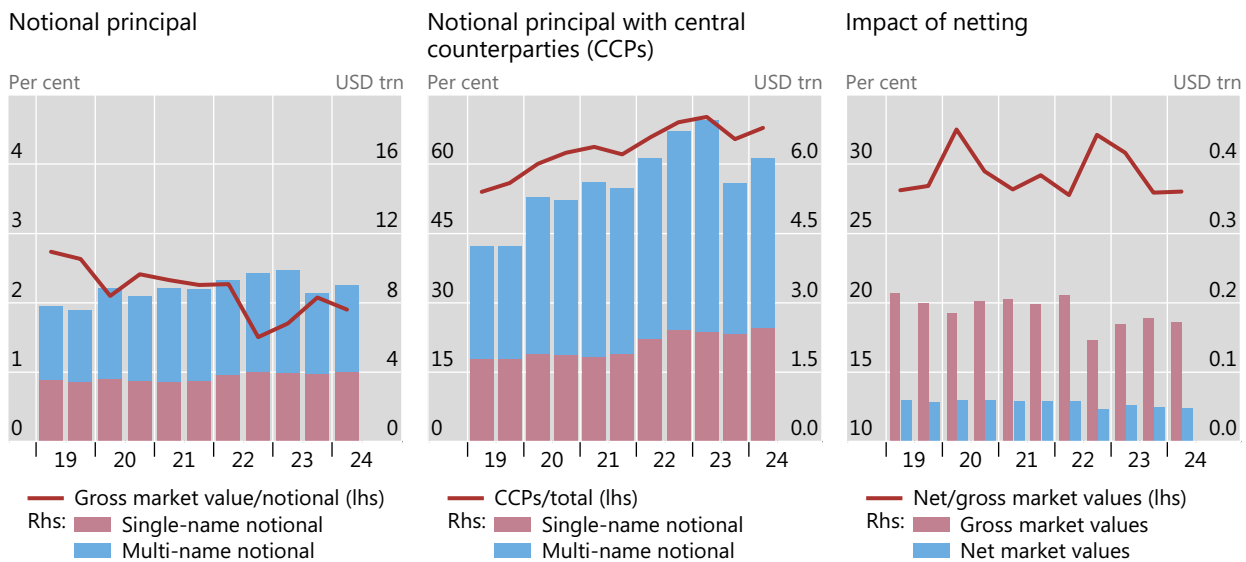


<sup>1</sup> At half-year end (end-June and end-December). Amounts denominated in currencies other than the US dollar are converted to US dollars at the exchange rate prevailing on the reference date.

Source: BIS OTC derivatives statistics.

## Credit default swaps<sup>1</sup>

Graph A.6



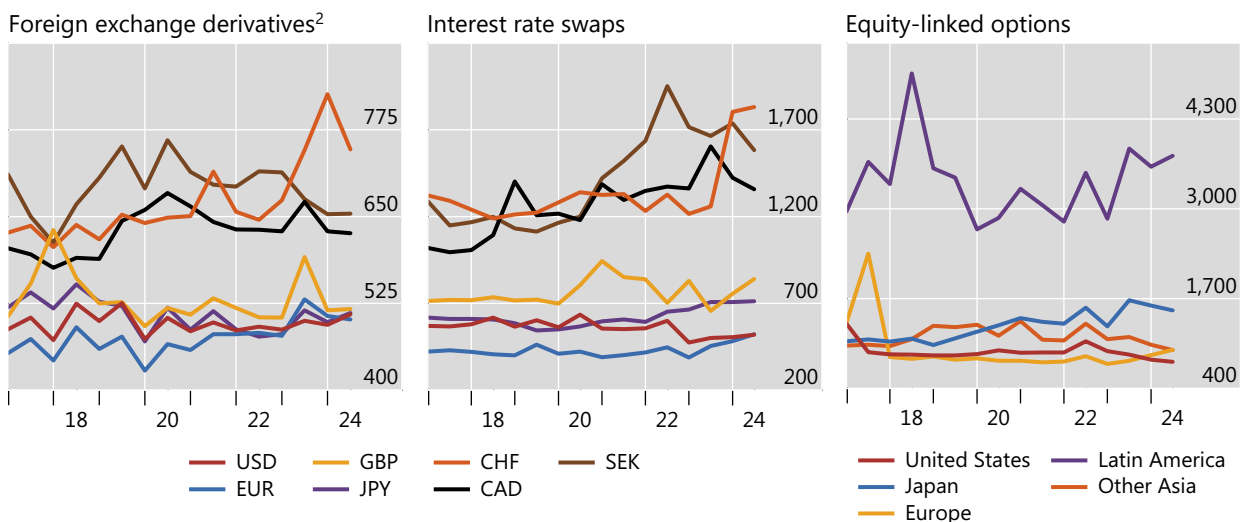
<sup>1</sup> At half-year end (end-June and end-December). Amounts denominated in currencies other than the US dollar are converted to US dollars at the exchange rate prevailing on the reference date.

Source: BIS OTC derivatives statistics.

## Concentration in global OTC derivatives markets

Herfindahl index<sup>1</sup>

Graph A.7



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

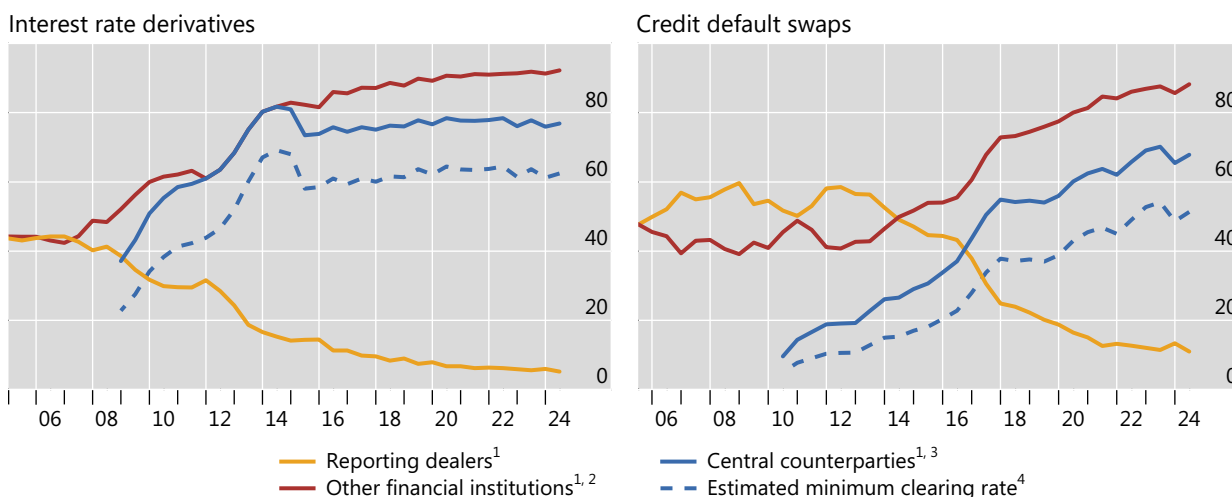
<sup>1</sup> The index ranges from 0 to 10,000, where a lower number indicates that there are many dealers with similar market shares (as measured by notional principal) and a higher number indicates that the market is dominated by a few reporting dealers. <sup>2</sup> Foreign exchange forwards, foreign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

Source: BIS OTC derivatives statistics.

## Growth of central clearing

Notional amounts outstanding by counterparty, in per cent

Graph A.8



<sup>1</sup> As a percentage of notional amounts outstanding against all counterparties. <sup>2</sup> Including central counterparties but excluding reporting dealers. <sup>3</sup> 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. <sup>4</sup> 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. The CCP 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.