

## Statistical release: BIS international banking statistics and global liquidity indicators at end-September 2022

- Banks' cross-border claims, which comprise mainly loans, debt securities and derivatives with a positive market value, increased by \$1.1 trillion in Q3 2022, raising the year-on-year growth rate to 10%. Derivatives drove this increase.
- Of this total, the change in cross-border *credit*, defined as loans and holdings of debt securities, was only \$169 billion. Euro-denominated credit outpaced dollar credit, which remained virtually unchanged.
- Credit to advanced economies continued to grow, while that to emerging market and developing economies<sup>1</sup> fell, driven by a contraction in credit to China and Hong Kong SAR. Foreign claims on Russia fell by a third since end-2021.
- In the BIS global liquidity indicators, dollar credit to non-banks in EMDEs fell sharply, whereas credit in euro and yen expanded. The contraction in dollar credit mainly reflected a drop in bank loans.
- The stock of international debt securities denominated in US dollars issued by EMDEs declined for the first time since the Great Financial Crisis of 2008–09.

### Cross-border credit sustained by interbank lending in euros

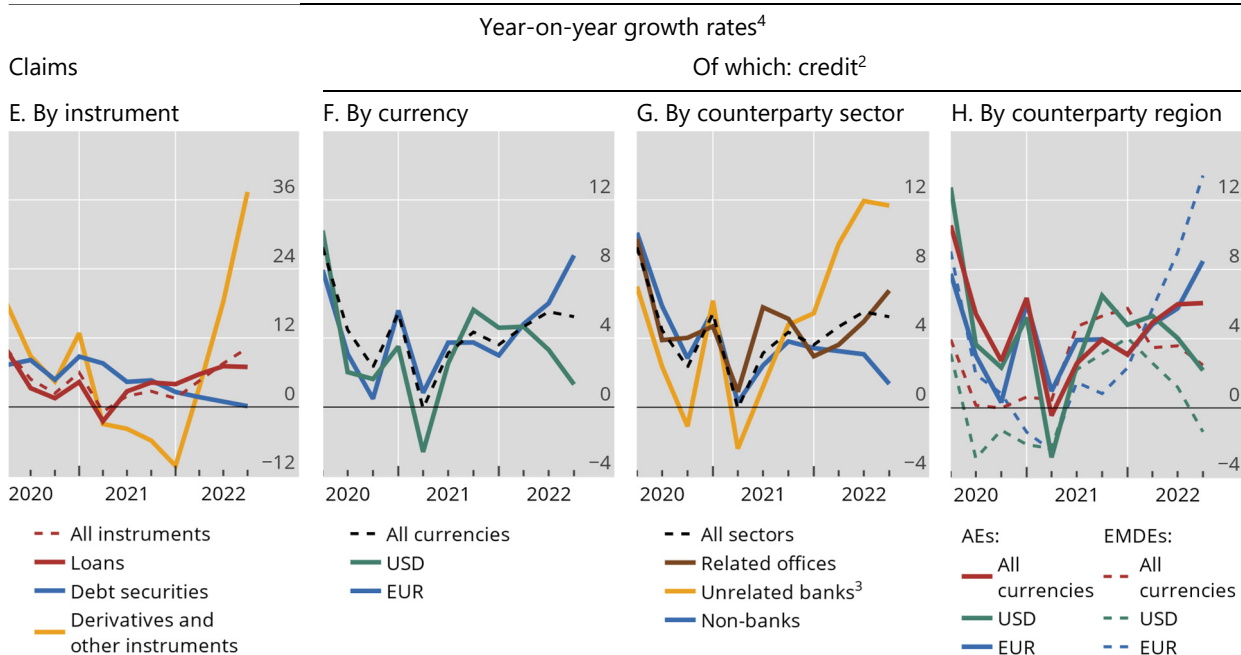
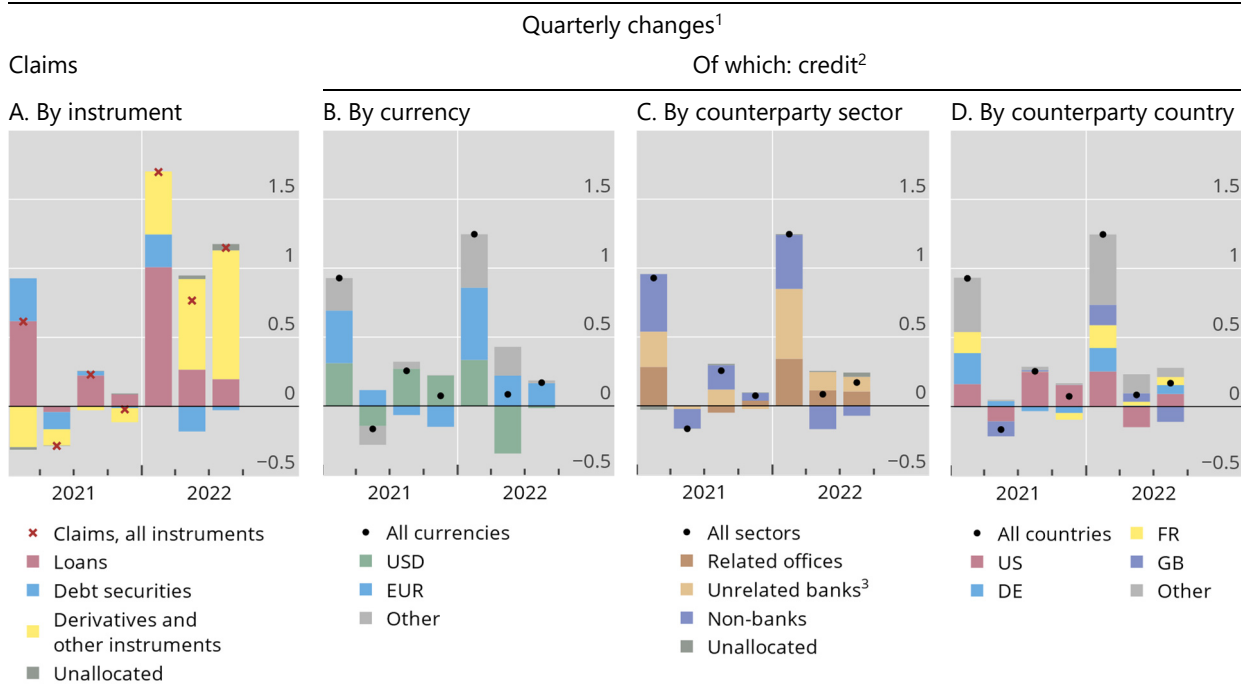
The BIS locational banking statistics (LBS) show that banks' cross-border claims<sup>2</sup> expanded by \$1.1 trillion during the third quarter of 2022 (+10% year-on-year (yoy)) on an FX- and break-adjusted basis (Graphs 1.A and 1.E).<sup>3</sup> Graph 1 summarises the changes (top row) and the annual growth rates (bottom row) across instruments, currencies and counterparties. The expansion in Q3 2022 reflected a third consecutive quarterly jump in the market value of derivatives and other instruments (+\$933 billion, Graph 1.A, yellow bars), booked mostly by banks in Europe. By contrast, the increase in cross-border credit – ie loans and holdings of debt securities – was far more modest, at \$169 billion (+5% yoy). Banks' holdings of debt securities fell for the second quarter in a row (–\$28 billion), while loans increased (+\$197 billion).

Within global cross-border credit, the pace of bank lending in euros and in dollars diverged further. Dollar credit slowed to 1% yoy while euro credit grew at 9% yoy (Graphs 1.B and 1.F). The Q3 2022 increase was almost entirely due to more credit denominated in euros (+\$165 billion); the slower growth in dollar-denominated credit

<sup>1</sup> Since December 2022, the country groupings *advanced economies (AEs)* and *emerging market and developing economies (EMDEs)* used in statistical commentaries have been aligned with the country classification in the BIS Annual Economic Report, as detailed [here](#).

<sup>2</sup> In the BIS locational banking statistics, claims comprise: (i) loans and deposits; (ii) holdings of debt securities; and (iii) derivatives with a positive market value and other residual instruments (combined).

<sup>3</sup> The US dollar appreciated against many currencies during the quarter. This reduces the non-dollar amounts outstanding when expressed in US dollars. Quarterly changes are reported on an adjusted basis, after removing exchange rate valuation effects and statistical breaks.



<sup>1</sup> Quarterly changes adjusted for breaks in series and exchange rate fluctuations, in trillions of US dollars. <sup>2</sup> Credit refers to loans and holdings of debt securities, ie excluding from “claims” all other instruments (derivatives with positive market value, equity and other residual instruments). <sup>3</sup> Includes credit to central banks and to banks unallocated by subsector. <sup>4</sup> Annual compound adjusted change, in per cent.

Source: BIS locational banking statistics.

possibly reflected the higher cost of funding in US dollars.<sup>4</sup> The divergence in dollar and euro credit was particularly stark for EMDEs: the former shrank for the first time

<sup>4</sup> The Federal Reserve had already raised dollar interest rates to 3%, while the ECB had just started its euro rate tightening cycle.

since early 2021 (-1% yoy), while growth in the latter accelerated to 13% yoy (Graph 1.H).

Global cross-border credit to most sectors continued to expand, with brisk growth in the interbank segment (Graphs 1.C and 1.G). Credit to unrelated banks and related offices rose by \$107 billion and \$104 billion, respectively. By contrast, credit to non-banks fell by \$72 billion (or 1% yoy), driven by banks in France, the United States and Japan. Credit to most AEs rose; the United Kingdom was the main exception with a \$111 billion drop, against the backdrop of tensions in the UK gilt market (Graph 1.D).

### Market value of derivatives surged, led by claims on the UK

The market value of banks' derivatives positions continued to swell in Q3 2022 against a backdrop of elevated market volatility and changing expectations about inflation. This pushed the yoy growth rate of cross-border derivatives claims beyond 35%, extending a trend that started in early 2022 (Graph 1.E).<sup>5</sup> The BIS consolidated banking statistics (CBS), which track the consolidated positions of banks headquartered in a particular country, show the size of banks' derivatives books with unaffiliated counterparties (Graph 2). Derivatives with a positive market value reached **\$4.7 trillion** by end-Q3 2022 (Graph 2.A). Those with a negative market value moved in tandem, leaving net market values close to zero over time (black dots).

#### Market value of banks' derivatives positions<sup>1</sup>

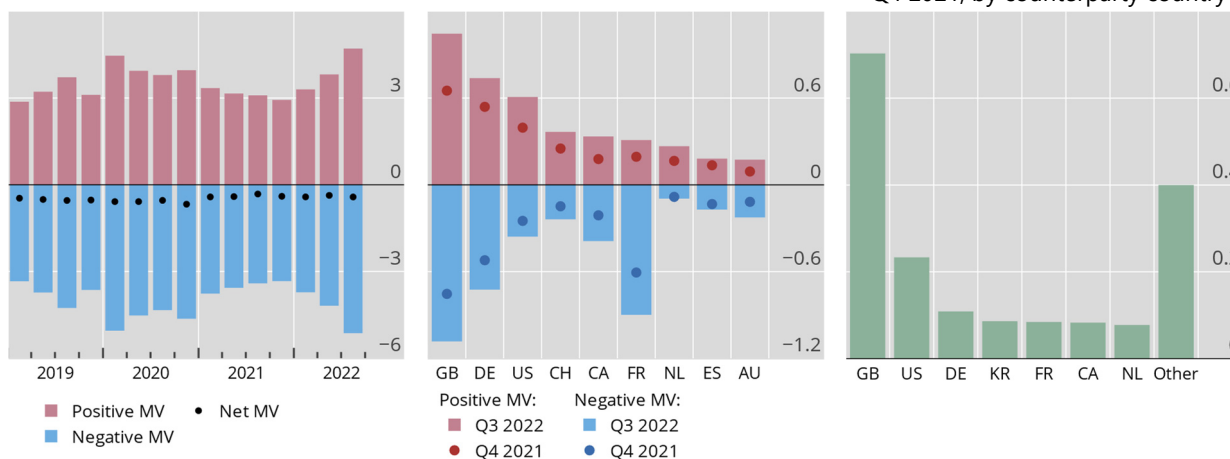
Market value (MV), in trillions of US dollars

Graph 2

A. Positions of all reporting banks<sup>2</sup>

B. By reporting banking system<sup>2</sup>

C. Change in derivatives claims since Q4 2021, by counterparty country



<sup>1</sup> Derivatives with a positive market value are reported in the CBS on a guarantor basis (CBS/G). The data presented include positions vis-à-vis residents in banks' home country. <sup>2</sup> Derivatives with a negative market value are reported in the CBS on an immediate counterparty basis (CBS/I). The reporting population for negative market value was restricted to the same set of countries reporting positive market values in CBS/G, to ensure consistency across the positive and negative market value series.

Source: BIS consolidated banking statistics.

<sup>5</sup> Derivatives positions on a locational basis include intragroup positions when risks associated with derivatives portfolios are transferred across trading desks within the same banking group.

The rise in derivatives positions was evident in most jurisdictions that are home to banks acting as market-makers. Among them, UK banks recorded the largest increase in their derivatives with a positive market value, followed by German and US banks (Graph 2.B). Since end-2021, \$700 billion (or 40%) of the increase in derivatives claims was recorded vis-à-vis counterparties in the United Kingdom (Graph 2.C).<sup>6</sup>

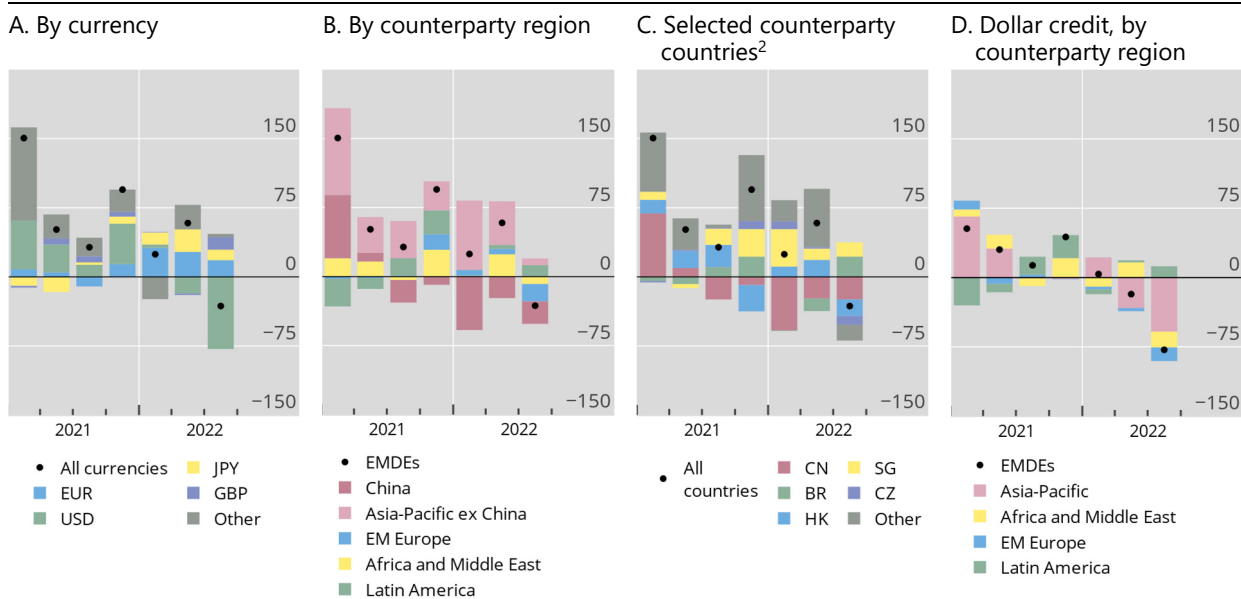
### Credit to EMDEs slowed as dollar lending shrank

Banks' cross-border credit to EMDEs declined by \$32 billion in Q3 2022 on account of weaker lending in US dollars (Graph 3.A). Against a backdrop of higher funding costs and persistent dollar strength, dollar credit to EMDEs fell by \$78 billion. Meanwhile, credit in other currencies held up, expanding by \$47 billion over the quarter. The drop in credit to EMDEs led to a slowdown in the annual growth rate of credit overall (+2% yoy), while that for dollar credit fell into negative territory (-1% for the first time since early 2021 (Graphs 1.H and 3.A).

#### Changes in cross-border credit to EMDEs<sup>1</sup>

Quarterly FX- and break-adjusted changes, in billions of US dollars

Graph 3



<sup>1</sup> Credit refers to loans and holdings of debt securities, ie removing from "total claims" all other instruments (derivatives with a positive market value, equity and other residual instruments). <sup>2</sup> The countries shown are the ones with the largest adjusted changes in the latest quarter.

Source: BIS locational banking statistics by residence.

While bank credit fell across many EMDEs during Q3 2022, the drops vis-à-vis China (-\$24 billion) and Hong Kong SAR (-\$18 billion) stood out (Graphs 3.B and 3.C).<sup>7</sup> Both economies struggled amid Covid-19-related shutdowns and other restrictive measures affecting business activity. By contrast, Singapore continued to

<sup>6</sup> This growth in derivatives positions is consistent with London's outside role in the clearing of derivatives and partly reflects changes in the market value of interest rate derivatives cleared at LCH Ltd in the United Kingdom.

<sup>7</sup> Banks' consolidated claims on China, as tracked in the CBS on a guarantor basis, also fell, with foreign claims on the non-bank private sector dropping by \$45 billion and interbank claims falling for the sixth consecutive quarter to reach \$195 billion, the lowest level in a decade.

attract credit (+\$16 billion). Overall, credit to emerging Asia contracted by \$17 billion. Elsewhere, credit to emerging Europe and Africa and the Middle East dropped by \$19 billion and \$8 billion, respectively.

The slowdown in dollar lending to EMDEs went beyond those regions that traditionally borrow predominantly in that currency. Dollar credit to emerging Asia-Pacific and Africa and the Middle East dropped by \$59 billion and \$17 billion, respectively (Graph 3.D). Dollar claims on emerging Europe, where the euro plays a larger role, also declined by \$15 billion. The exception was Latin America, a major dollar borrower and yet the only emerging region where dollar credit grew in Q3 (Graph 3.D). Credit to the region rose by \$13 billion overall, as lending to Brazil (+\$22 billion) outweighed a \$10 billion decline vis-à-vis Argentina, the Bahamas and Chile (Graphs 3.B and 3.C).

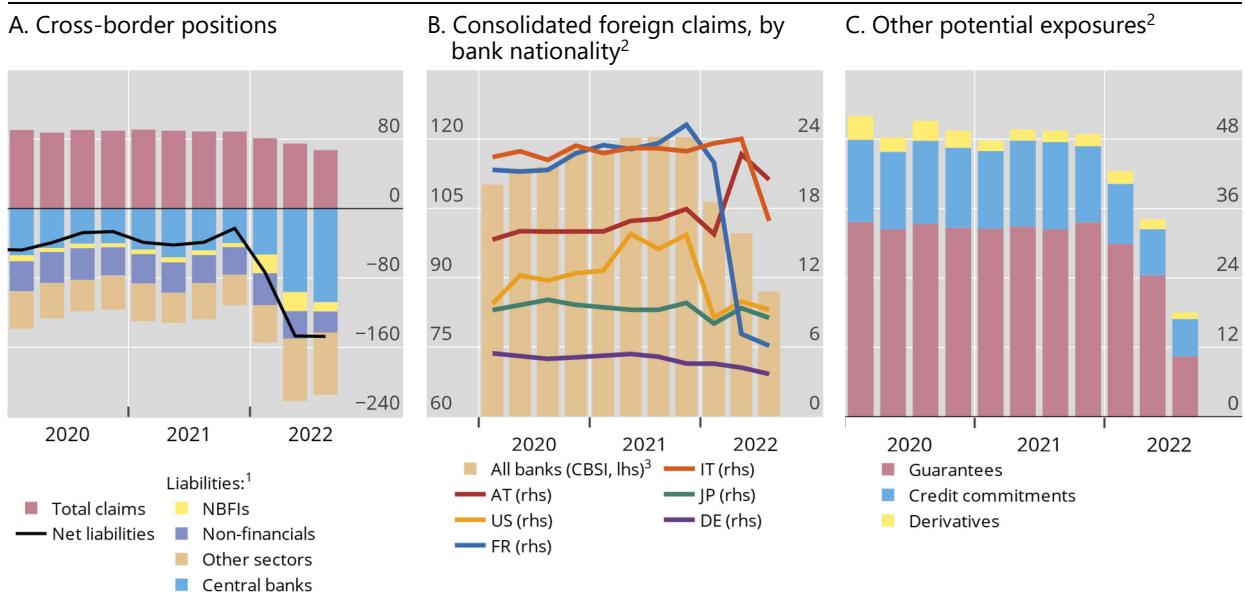
### Banks' exposures to Russia continued to fall

Banks continued to reduce their cross-border claims on Russia in Q3 2022, even as their liabilities to the country remained elevated (Graph 4).<sup>8</sup> Cross-border claims to Russia dropped by \$7 billion, the third consecutive quarterly decline (Graph 4.A).

#### Bank exposures to Russia

Outstanding amounts, in billions of US dollars

Graph 4



Panel A covers all BIS reporting banks, including banks in China and Chinese banks in other reporting countries. Panels B and C exclude Chinese banks, as Chinese authorities do not report the CBS.

<sup>1</sup> Liabilities (by counterparty sector) are shown as negative figures on the vertical scale. <sup>2</sup> Consolidated, on a guarantor basis (CBS/G). <sup>3</sup> On an immediate counterparty basis (CBS/I). Partial data from the BIS locational banking statistics suggest that Chinese banks increased their claims on Russia in 2022, accounting for over a third of all cross-border claims on Russia at end-Q3 2022.

Source: BIS consolidated and locational banking statistics.

Liabilities to non-bank financial intermediaries (NBFIs) and non-financials in Russia fell by \$11 billion and \$7 billion, respectively. At the same time, cross-border

<sup>8</sup> The positions vis-à-vis Russia are reported by other BIS reporting countries. The BIS ceased receiving data submissions from the authorities in Russia. Local positions booked by banks in Russia, and their positions vis-à-vis counterparties abroad, have not been reported since end-2021.

liabilities to the Central Bank of the Russian Federation grew by \$12 billion in Q3 2022, as blocked coupon payments and redemptions continued to accumulate at Euroclear.<sup>9</sup>

The CBS provide a more comprehensive view of how banks' consolidated exposures to Russia receded in the course of 2022 (Graph 4.B). Since Q4 2021, foreign claims reported on Russia dropped by 28% to \$87 billion at end Q3 2022. Other potential exposures fell by even more (-63%) to reach \$18 billion over the same period (Graph 4.C). French (-\$19 billion), US (-\$6 billion) and Italian banks (-\$6 billion) cut foreign claims the most since end-2021.

<sup>9</sup> [www.euroclear.com/newsandinsights/en/press/2022/2022-mr-17-euroclear-continues-to-outperform.html](https://www.euroclear.com/newsandinsights/en/press/2022/2022-mr-17-euroclear-continues-to-outperform.html).

## Global liquidity indicators at end-September 2022

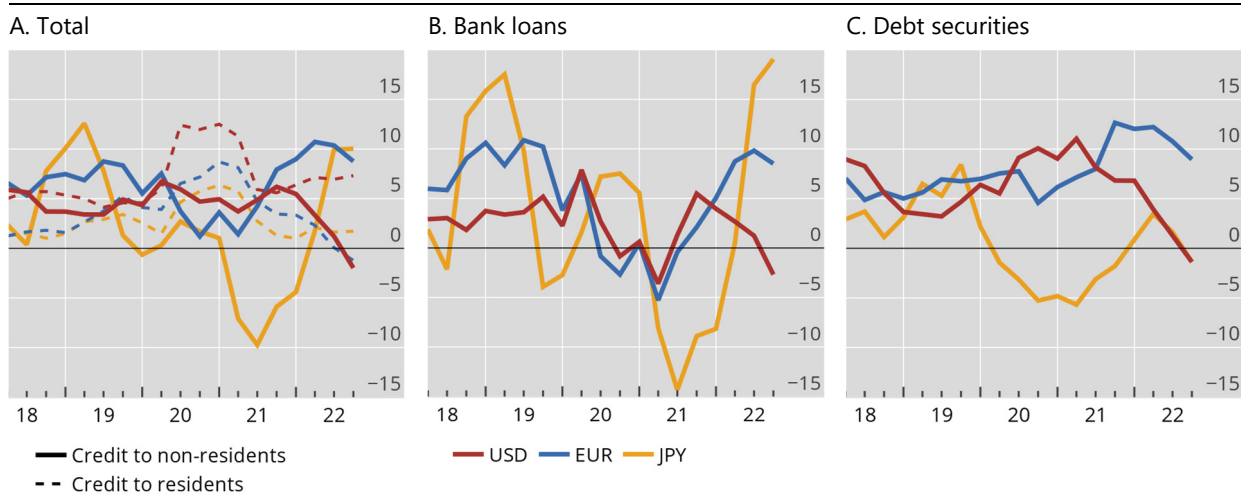
The BIS global liquidity indicators (GLIs) track credit to non-bank borrowers, covering both loans extended by banks and funding from global bond markets through the issuance of international debt securities (IDS). The main focus is on foreign currency credit denominated in three major reserve currencies (US dollars, euros and Japanese yen) to non-residents, ie borrowers outside the respective currency areas. The GLIs monitor growth in this credit relative to that denominated in those same currencies to residents within these currency areas (as reported in national financial accounts).<sup>10</sup>

In Q3 2022, global foreign currency credit denominated in US dollars contracted further while that in euros and yen expanded. As a result, annual growth rates diverged (Graph 5.A). Dollar credit to non-banks outside the United States stood at \$13.1 trillion at quarter-end, 2% lower than a year earlier (Annex Graph C.1). Growth in euro credit to non-banks outside the euro area remained robust at 9% yoy, pushing the amount outstanding to €4 trillion (\$3.8 trillion). Similarly, yen credit to non-banks outside Japan grew at 10% yoy, reflecting brisk growth in bank lending (19% yoy) (Graph 5.B). This pushed the stock of yen credit to ¥50.7 trillion (\$0.35 trillion). In all three currencies, the issuance of IDS slowed (Graph 5.C).

### Growth of credit in major currencies<sup>1</sup>

Year-on-year changes, in per cent

Graph 5



<sup>1</sup> For residents, credit in US dollars to borrowers in the United States, in euros to borrowers in the euro area, and in Japanese yen to borrowers in Japan. For residents, the borrower sector is non-financials. For non-residents, the borrower sector is non-banks. The calculation of year-on-year growth rates is based on the quarterly changes adjusted for breaks in series and exchange rate fluctuations (see the [GLI methodology](#)).

Source: BIS global liquidity indicators.

Borrowers in EMDEs also saw dollar and euro credit diverge. Credit to non-banks in EMDEs fell in dollars but expanded in euros, leaving the respective stocks at \$5.3 trillion and €0.9 trillion (Graph 6.A). In one of the largest contractions on record, dollar credit to EMDEs fell by \$135 billion during Q3 2022 (Graph 6.B), mainly vis-à-vis borrowers in Asia-Pacific (–\$110 billion) in particular those in China (–\$41 billion) and Hong Kong SAR (–\$49 billion). Dollar credit to emerging Europe (–\$18 billion),

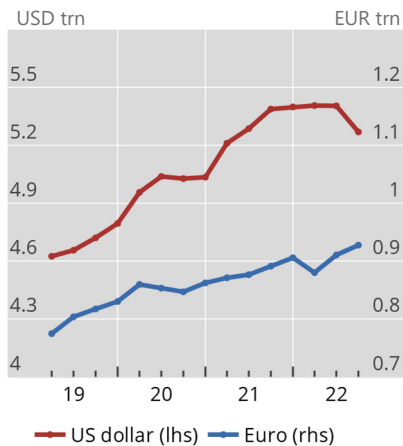
<sup>10</sup> For more details, see the GLI methodology: [www.bis.org/statistics/gli/gli\\_methodology.pdf](http://www.bis.org/statistics/gli/gli_methodology.pdf).

Africa and the Middle East (-\$7 billion) and Latin America (-\$1 billion) also contracted.

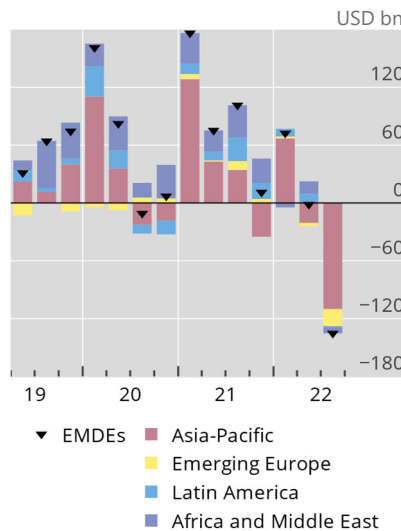
## Foreign currency credit to non-banks in EMDEs

Graph 6

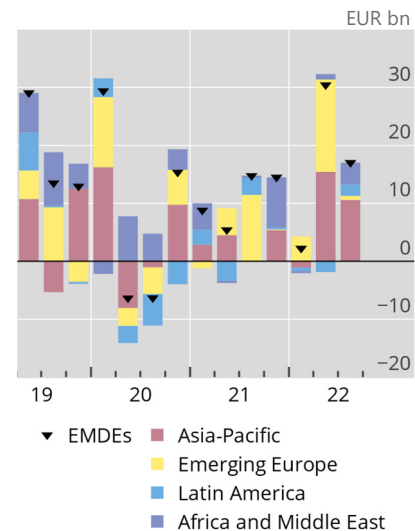
### A. Stocks, by currency



### B. Quarterly changes in dollar credit<sup>1</sup>



### C. Quarterly changes in euro credit<sup>1</sup>



<sup>1</sup> Quarterly changes are adjusted for breaks in series. Data on local loans denominated in foreign currency extended by banks in Russia are not available after Q3 2021; quarterly changes are assumed to be zero in later quarters.

Sources: BIS global liquidity indicators; BIS calculations.

In contrast to dollar credit, growth in euro credit to non-banks in EMDEs remained resilient (Graph 6.C). Loans grew by €13 billion in Q3, while net issuance (gross issuance less redemptions) of IDS added €4 billion. Most of the new credit went to borrowers in Asia-Pacific (+€11 billion), followed by those in Africa and the Middle East (+€4 billion), Latin America (+€2 billion) and emerging Europe (+€1 billion).

The tightening in dollar credit to EMDEs was driven by a contraction in bank loans that left the stock of loans 3% lower than the year before (Graph 7.A, dashed line). The third quarter also saw the first decline in the stock of dollar-denominated IDS since the Great Financial Crisis: EMDEs' net issuance of dollar bonds dropped by \$11 billion, reducing the growth rate to 1.5% yoy (dotted line).

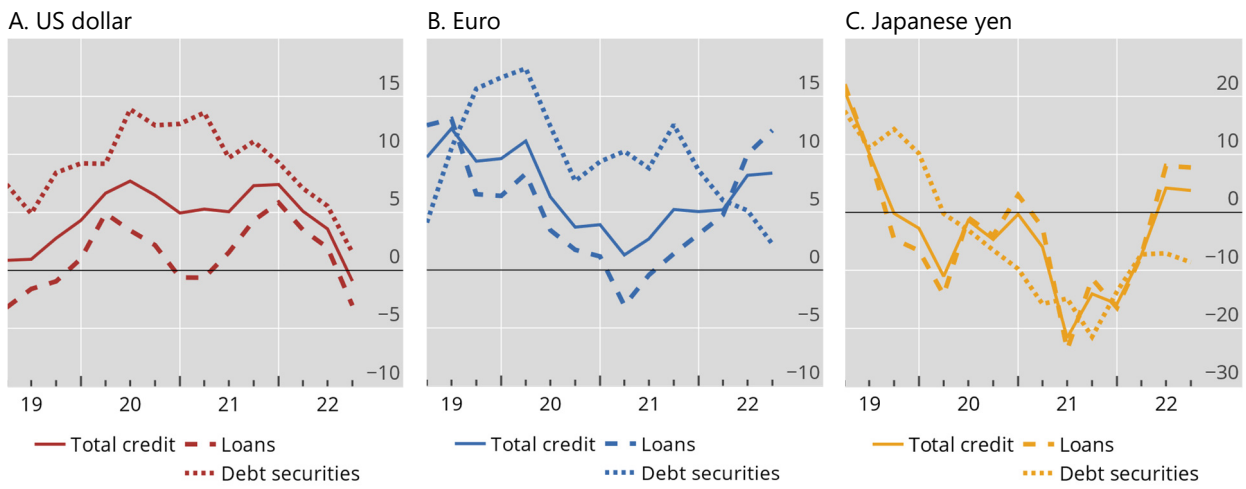
The expanding stock of euro credit to EMDEs reflected the rapid pace of bank lending, which grew at a rate of 12% yoy (Graph 7.B, dashed line). Meanwhile, net issuance of IDS slowed to 2% yoy (dotted line). Yen credit also expanded in Q3 thanks to bank lending (Graph 7.C, solid line). Yen-denominated bank loans to EMDEs reached ¥10.2 trillion (\$71 billion), 8% higher than a year before (dashed line). Net issuance of yen-denominated IDS, however, continued to decline at 9% yoy (dotted line). The bulk of this decline was due to reduced issuance by the non-financial sector (-6% yoy).



## Growth of foreign currency credit to non-banks in EMDEs

Year-on-year changes, in per cent<sup>1</sup>

Graph 7



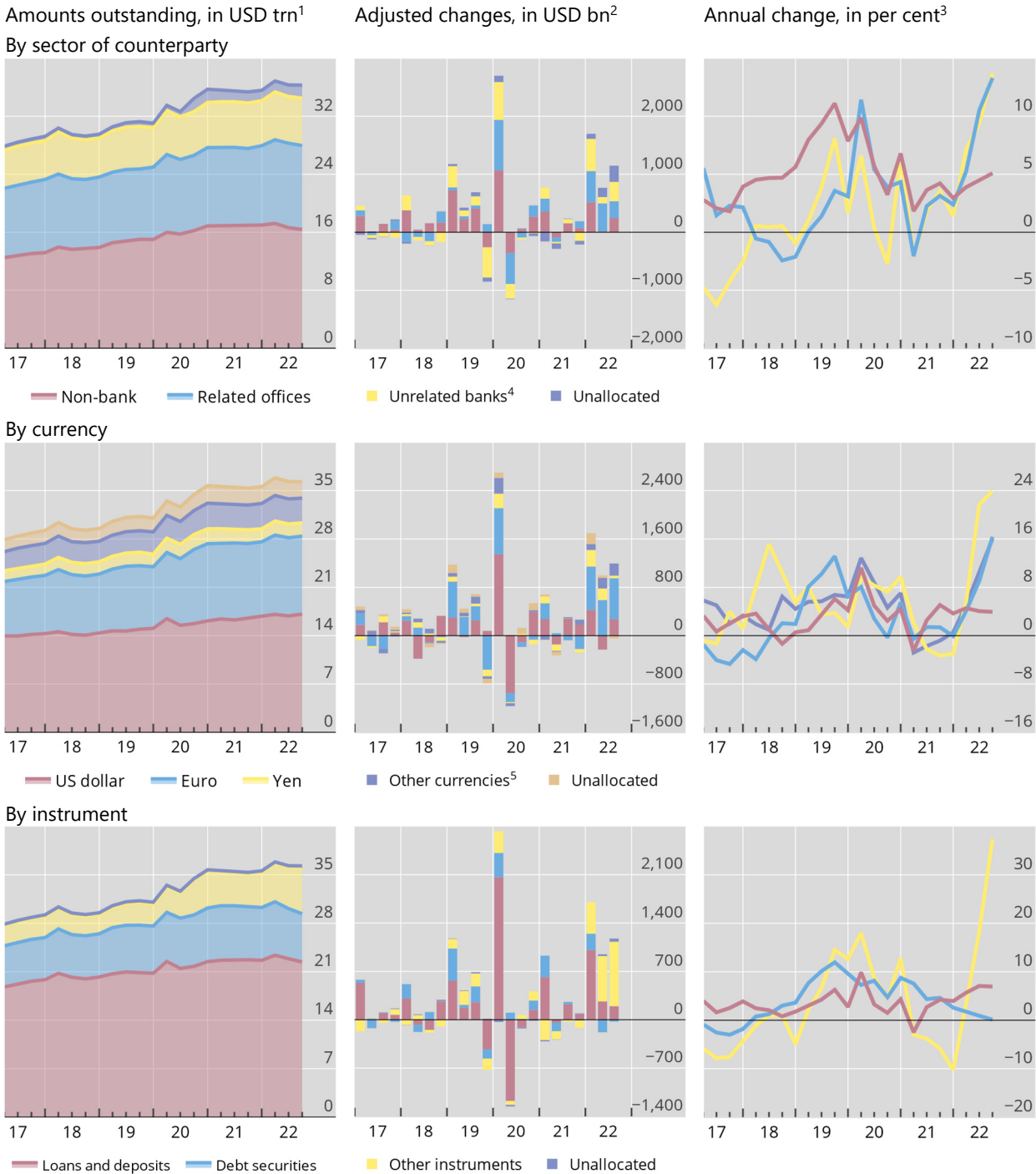
<sup>1</sup> The calculation of year-on-year growth rates is based on the quarterly changes adjusted for breaks in series and exchange rate fluctuations. For more information, see the [GLI methodology](#).

Source: BIS global liquidity indicators.

## Annex A Locational banking statistics graphs

Cross-border claims by sector, currency and instrument

Graph A.1



<sup>1</sup> At quarter-end. Amounts denominated in currencies other than the US dollar are converted to US dollars at the exchange rate prevailing on the reference date. <sup>2</sup> Quarterly changes in amounts outstanding, adjusted for the impact of exchange rate movements between quarter-ends and methodological breaks in the data. <sup>3</sup> Geometric mean of quarterly percentage adjusted changes. <sup>4</sup> Includes central banks and banks unallocated by subsector between interoffice and unrelated banks. <sup>5</sup> Other reported currencies, calculated as all currencies minus US dollar, euro, yen and unallocated currencies. The currency is known but reporting is incomplete.

Source: BIS locational banking statistics. Further information is available at [www.bis.org/statistics/bankstats.htm](http://www.bis.org/statistics/bankstats.htm).

# Cross-border claims by borrowing region

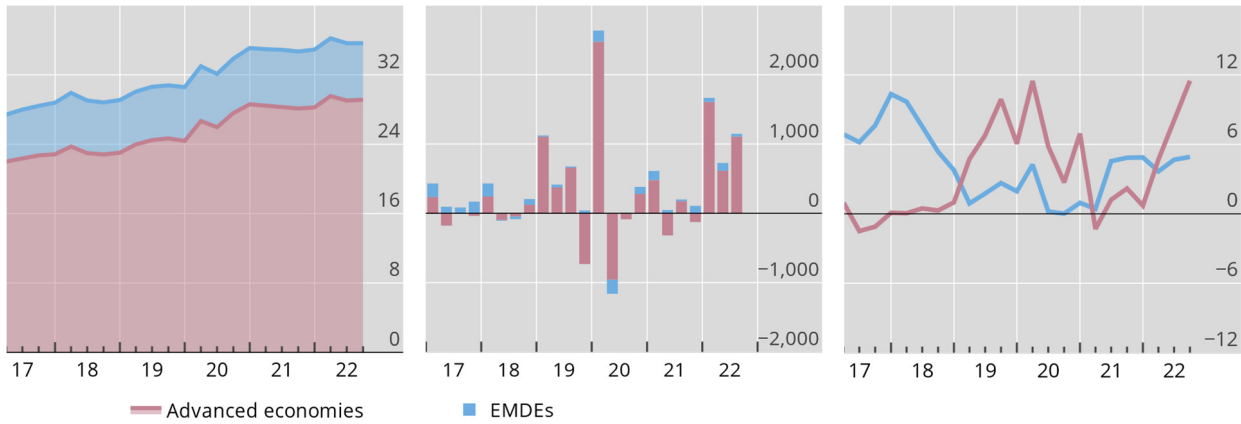
Graph A.2

Amounts outstanding, in USD trn<sup>1</sup>

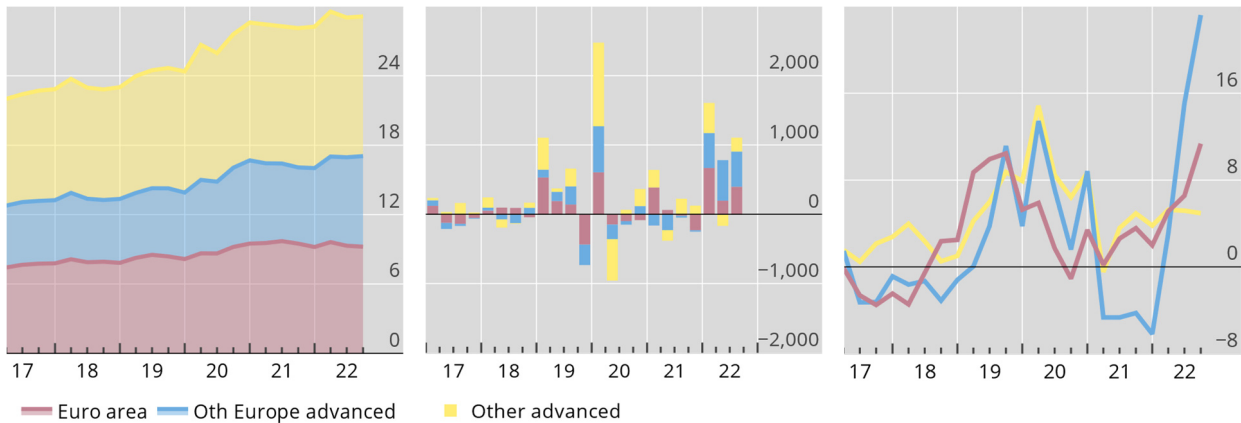
Adjusted changes, in USD bn<sup>2</sup>

Annual change, in per cent<sup>3</sup>

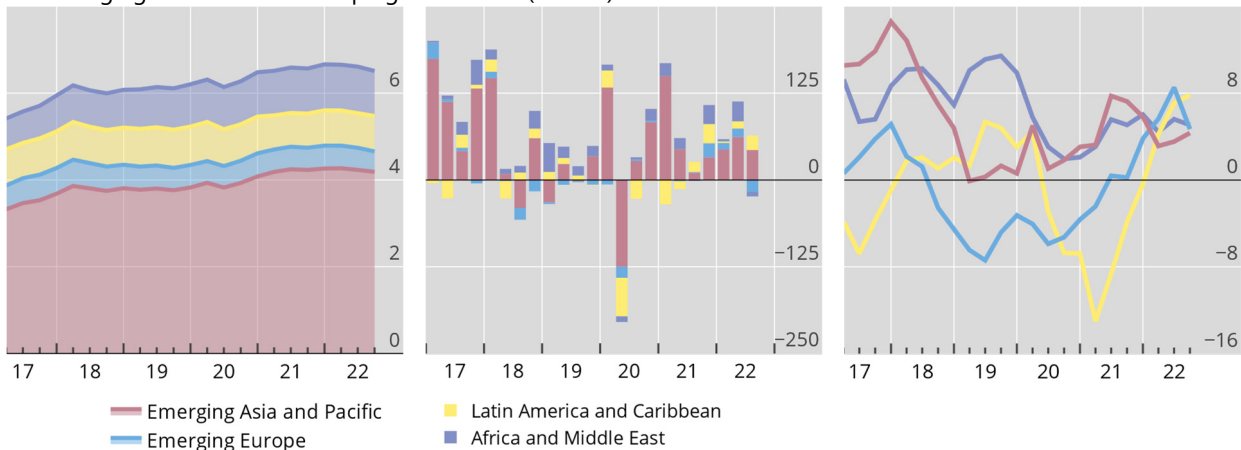
On all countries



On advanced economies



On emerging market and developing economies (EMDEs)



<sup>1</sup> At quarter-end. Amounts denominated in currencies other than the US dollar are converted to US dollars at the exchange rate prevailing on the reference date. <sup>2</sup> Quarterly changes in amounts outstanding, adjusted for the impact of exchange rate movements between quarter-ends and methodological breaks in the data. <sup>3</sup> Geometric mean of quarterly percentage adjusted changes.

Source: BIS locational banking statistics. Further information is available at [www.bis.org/statistics/bankstats.htm](http://www.bis.org/statistics/bankstats.htm).

# Cross-border claims by borrowing country

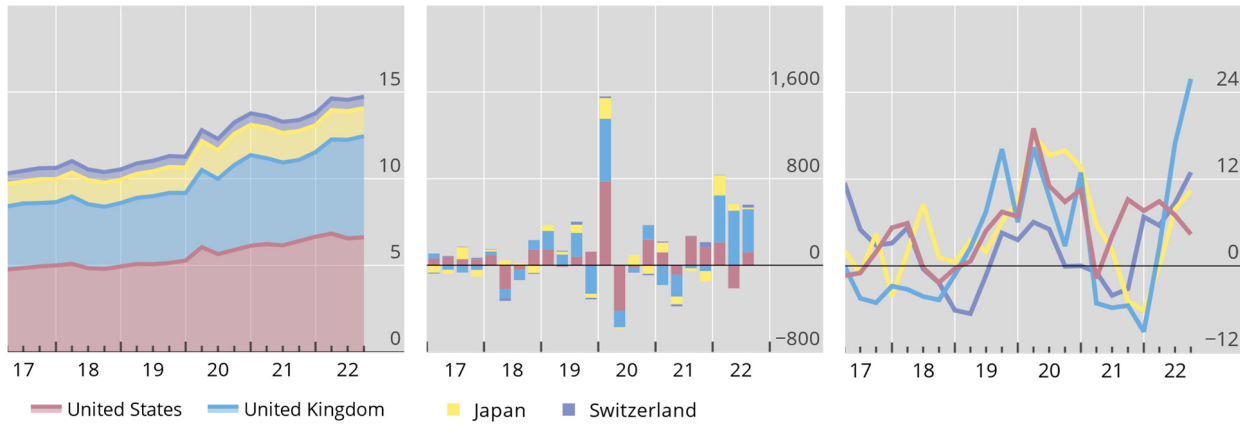
Graph A.3

Amounts outstanding, in USD trn<sup>1</sup>

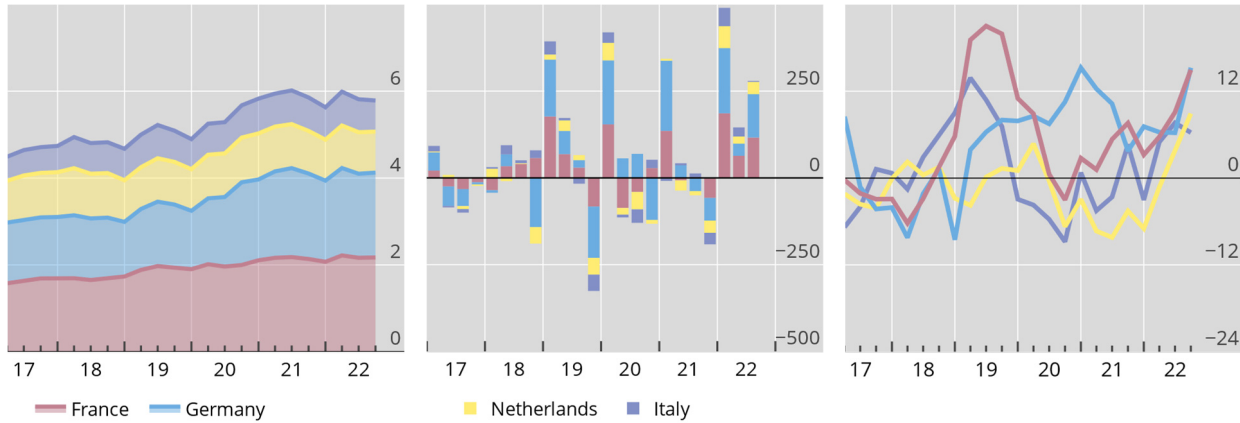
Adjusted changes, in USD bn<sup>2</sup>

Annual change, in per cent<sup>3</sup>

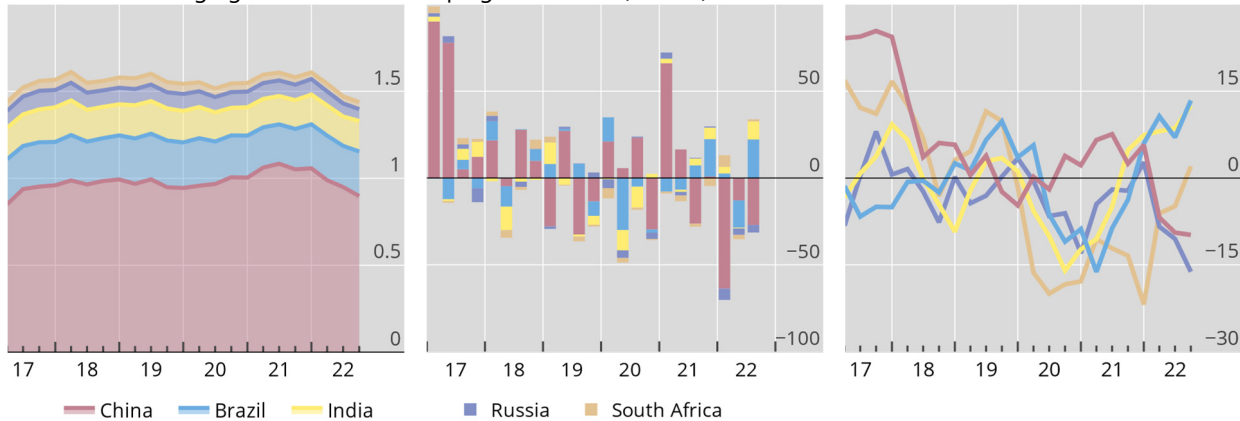
On selected advanced economies



On selected euro area countries



On selected emerging market and developing economies (EMDEs)



<sup>1</sup> At quarter-end. Amounts denominated in currencies other than the US dollar are converted to US dollars at the exchange rate prevailing on the reference date. <sup>2</sup> Quarterly changes in amounts outstanding, adjusted for the impact of exchange rate movements between quarter-ends and methodological breaks in the data. <sup>3</sup> Geometric mean of quarterly percentage adjusted changes.

Source: BIS locational banking statistics. Further information is available at [www.bis.org/statistics/bankstats.htm](http://www.bis.org/statistics/bankstats.htm).

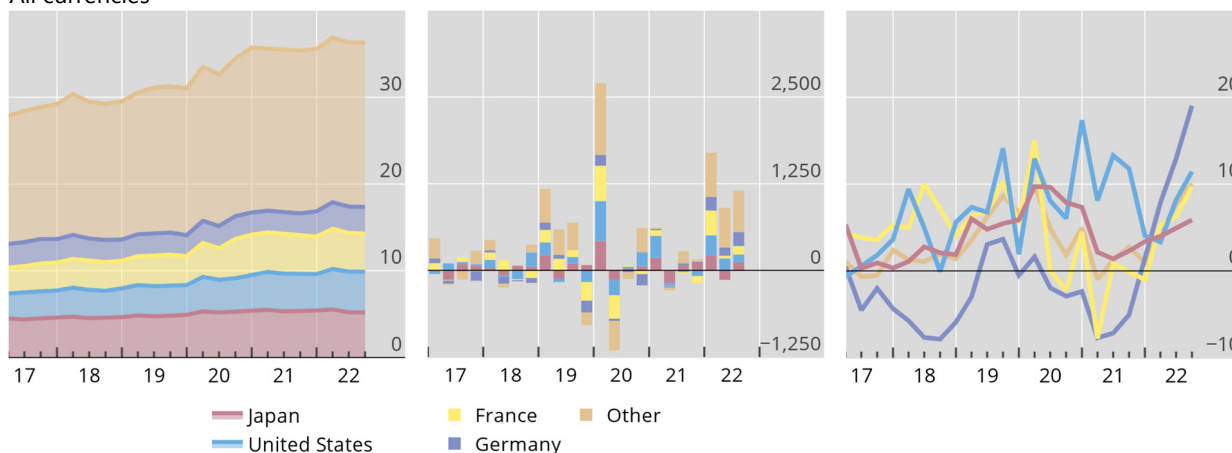
Cross-border claims by nationality of reporting bank and currency of denomination Graph A.4

Amounts outstanding, in USD trn<sup>1</sup>

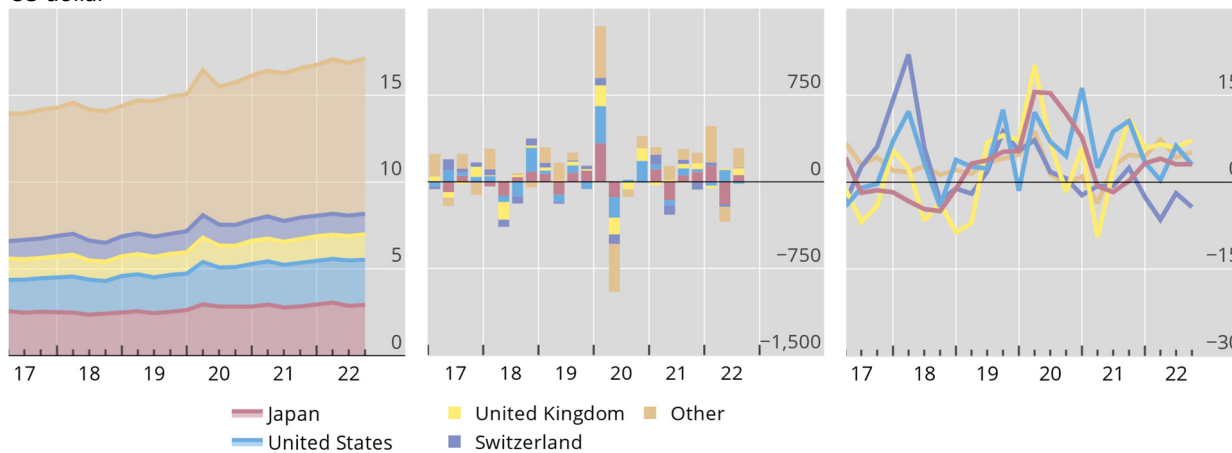
Adjusted changes, in USD bn<sup>2</sup>

Annual change, in per cent<sup>3</sup>

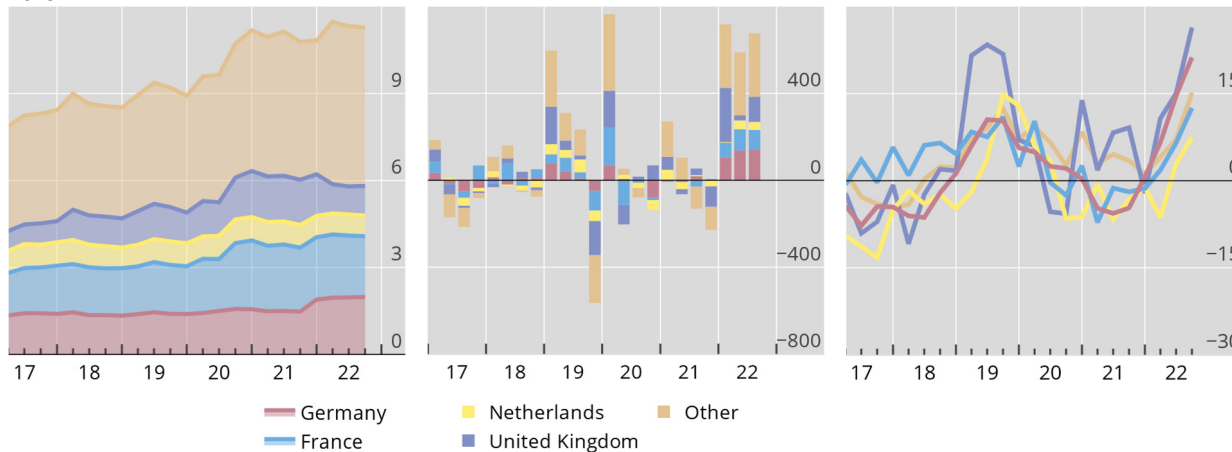
All currencies



US dollar



Euro



<sup>1</sup> At quarter-end. Amounts denominated in currencies other than the US dollar are converted to US dollars at the exchange rate prevailing on the reference date. <sup>2</sup> Quarterly changes in amounts outstanding, adjusted for the impact of exchange rate movements between quarter-ends and methodological breaks in the data. <sup>3</sup> Geometric mean of quarterly percentage adjusted changes.

Source: BIS locational banking statistics. Further information is available at [www.bis.org/statistics/bankstats.htm](http://www.bis.org/statistics/bankstats.htm).

# Cross-border liabilities of reporting banks

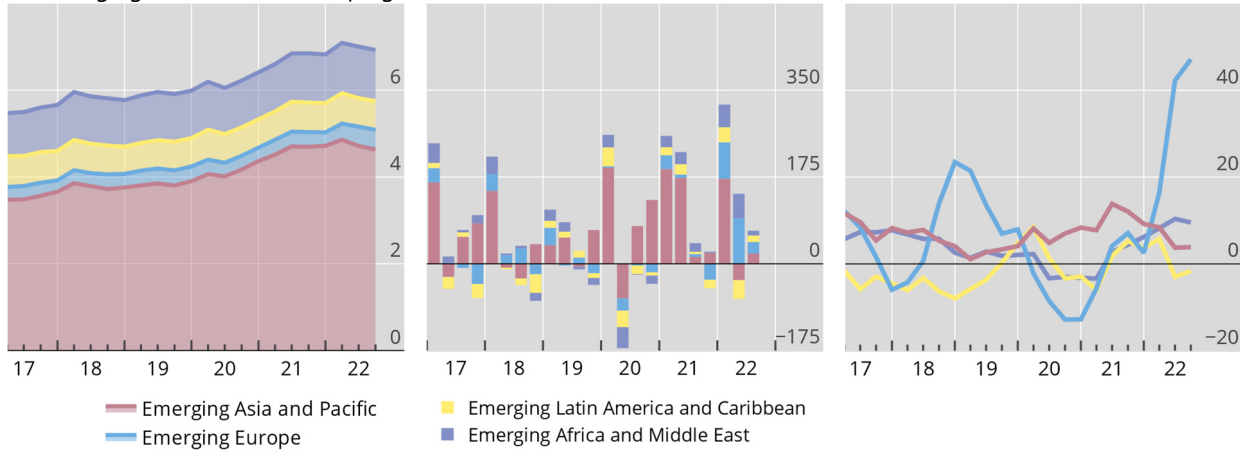
Graph A.5

Amounts outstanding, in USD trn<sup>1</sup>

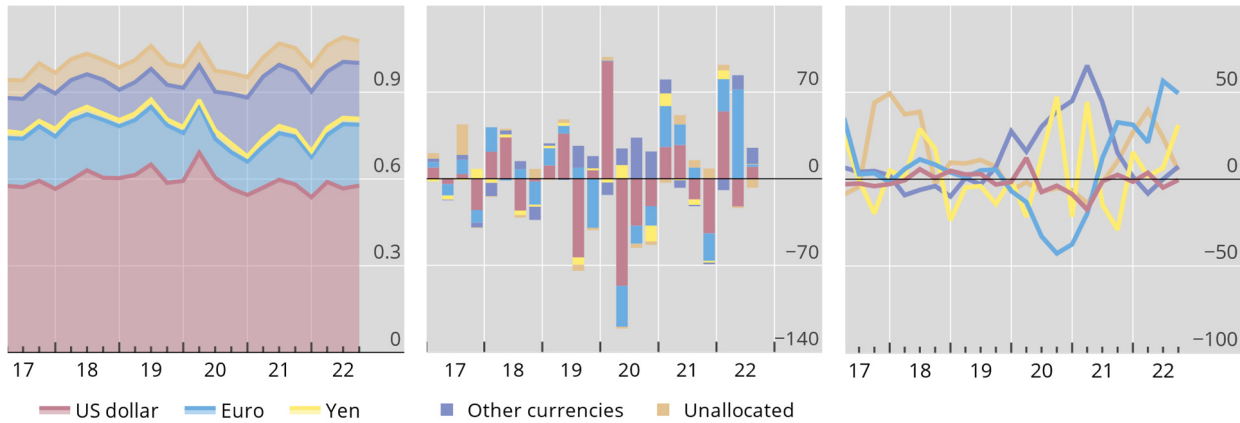
Adjusted changes, in USD bn<sup>2</sup>

Annual change, in per cent<sup>3</sup>

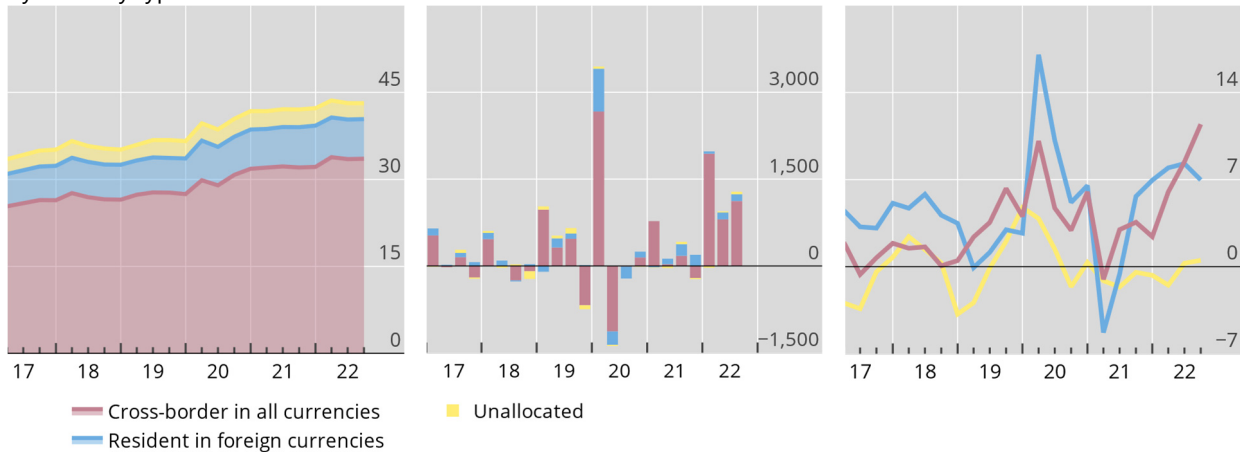
To emerging market and developing economies (EMDEs)



To central banks



By currency type and location



<sup>1</sup> At quarter-end. Amounts denominated in currencies other than the US dollar are converted to US dollars at the exchange rate prevailing on the reference date. <sup>2</sup> Quarterly changes in amounts outstanding, adjusted for the impact of exchange rate movements between quarter-ends and methodological breaks in the data. <sup>3</sup> Geometric mean of quarterly percentage adjusted changes.

Source: BIS locational banking statistics. Further information is available at [www.bis.org/statistics/bankstats.htm](http://www.bis.org/statistics/bankstats.htm).

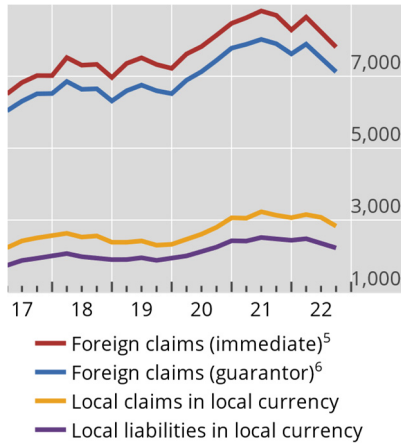
## Annex B Consolidated banking statistics graphs

### Consolidated claims of reporting banks on advanced economies

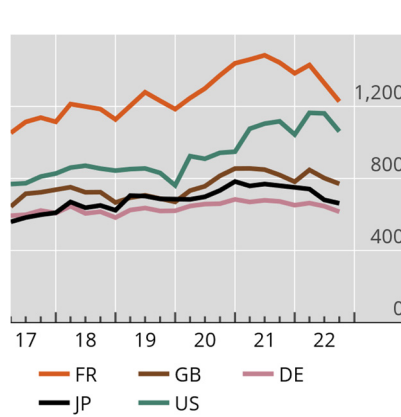
Graph B.1

Foreign claims and local positions,  
in USD bn<sup>1,2</sup>

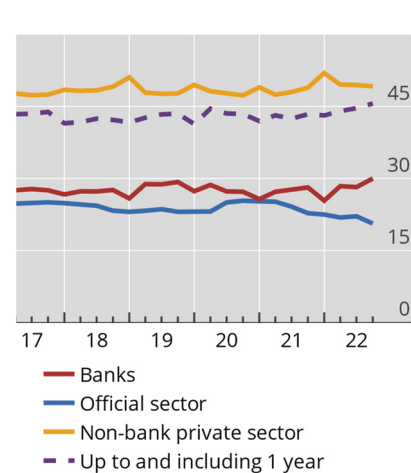
On the euro area



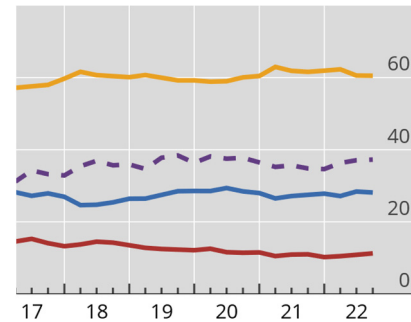
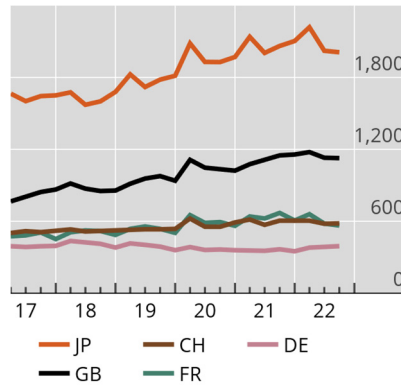
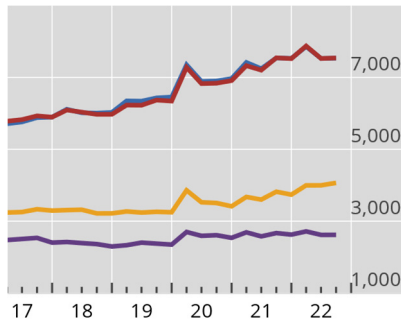
Foreign claims of selected creditors,  
in USD bn<sup>1,3</sup>



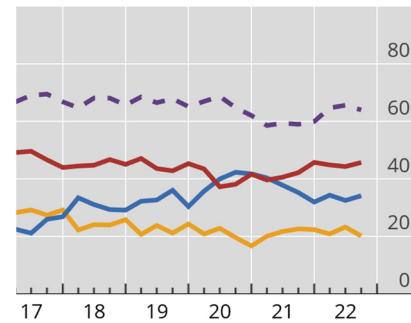
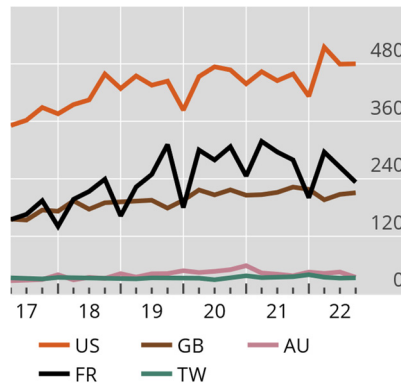
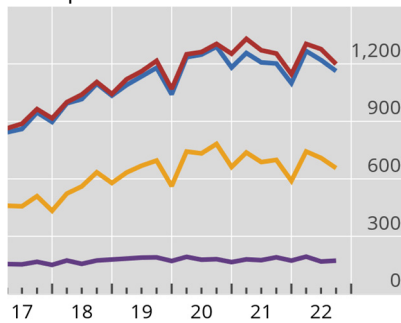
International claims, by sector and  
maturity, in per cent<sup>4</sup>



On the United States



On Japan



<sup>1</sup> Amounts outstanding at quarter-end. Amounts denominated in currencies other than the US dollar are converted to US dollars at the exchange rate prevailing on the reference date. <sup>2</sup> Excludes domestic claims, ie claims on residents of a bank's home country. <sup>3</sup> Foreign claims on a guarantor basis, by nationality of reporting bank. The banking systems shown are not necessarily the largest foreign bank creditors on each reference date. <sup>4</sup> As a percentage of international claims outstanding. <sup>5</sup> On an immediate counterparty basis. Includes the unconsolidated claims of banks headquartered outside but located inside CBS-reporting countries. <sup>6</sup> On a guarantor basis.

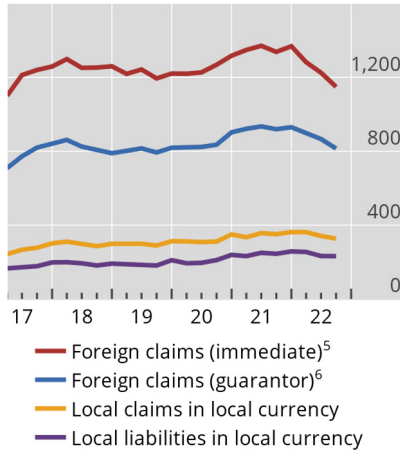
Source: BIS consolidated banking statistics (CBS). Further information is available at [www.bis.org/statistics/consstats.htm](http://www.bis.org/statistics/consstats.htm).

## Consolidated claims of reporting banks on emerging market and developing economies (EMDEs)

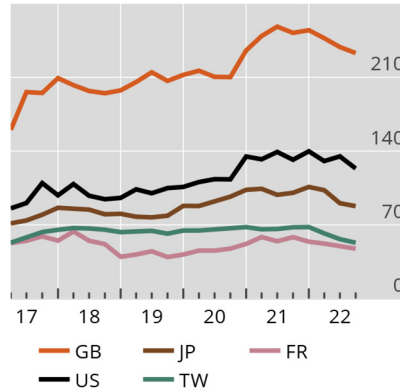
Graph B.2

Foreign claims and local positions, in USD bn<sup>1,2</sup>

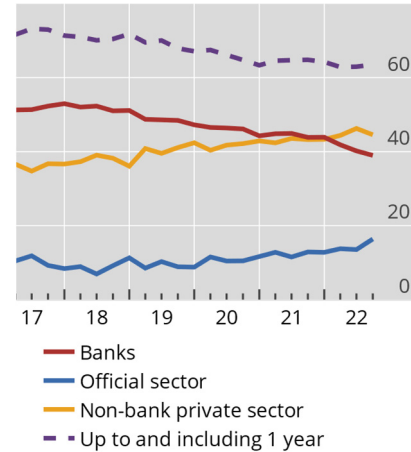
On China



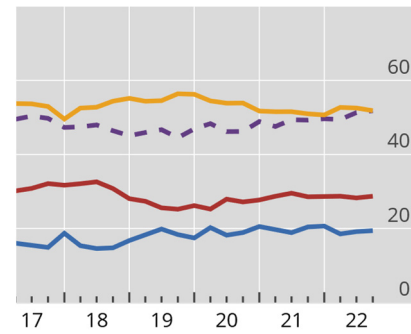
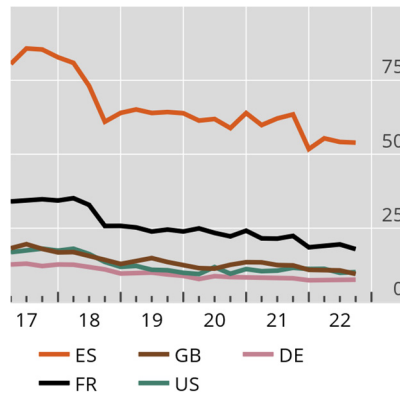
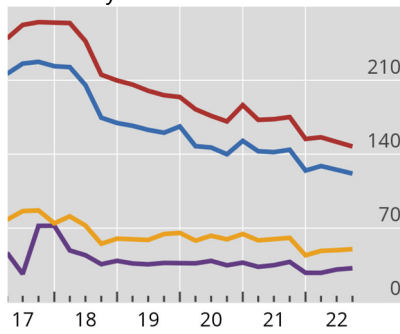
Foreign claims of selected creditors, in USD bn<sup>1,3</sup>



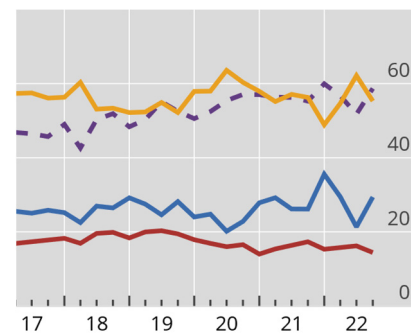
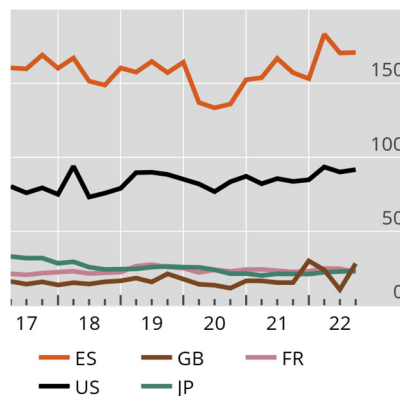
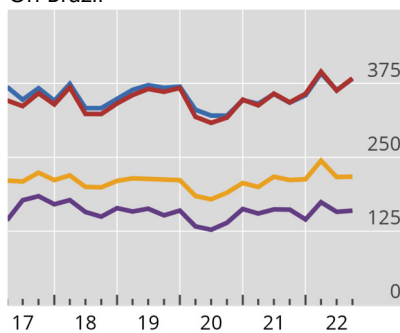
International claims, by sector and maturity, in per cent<sup>4</sup>



On Turkey



On Brazil



<sup>1</sup> Amounts outstanding at quarter-end. Amounts denominated in currencies other than the US dollar are converted to US dollars at the exchange rate prevailing on the reference date. <sup>2</sup> Excludes domestic claims, i.e. claims on residents of a bank's home country. <sup>3</sup> Foreign claims on a guarantor basis, by nationality of reporting bank. The banking systems shown are not necessarily the largest foreign bank creditors on each reference date. <sup>4</sup> As a percentage of international claims. <sup>5</sup> On an immediate counterparty basis. Includes the unconsolidated claims of banks headquartered outside but located inside CBS-reporting countries. <sup>6</sup> On a guarantor basis.

Source: BIS consolidated banking statistics (CBS). Further information is available at [www.bis.org/statistics/consstats.htm](http://www.bis.org/statistics/consstats.htm).

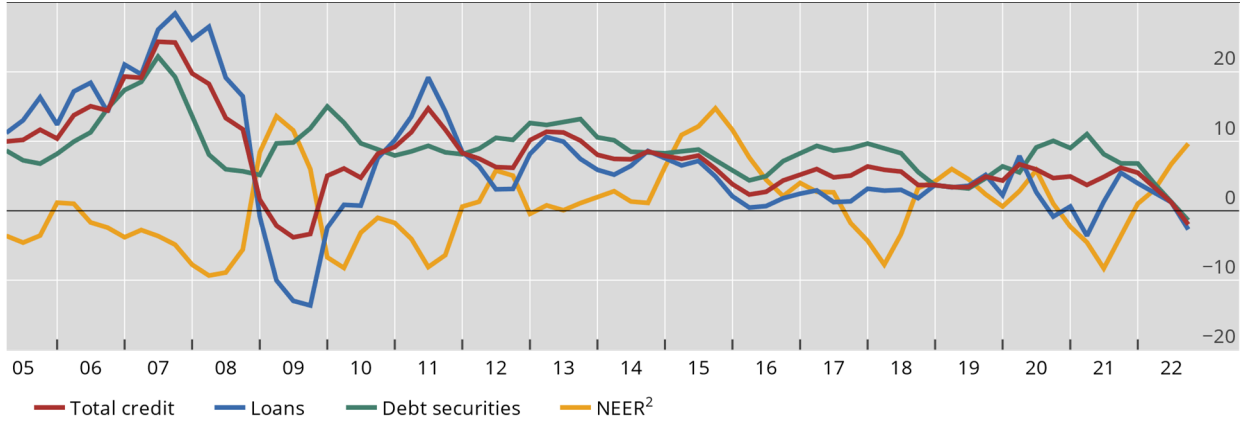


## Annex C Global liquidity indicators graphs

### US dollar credit outside the United States<sup>1</sup>

Annual change, in per cent

Graph C.1



Further information on the BIS global liquidity indicators is available at [www.bis.org/statistics/about\\_gli\\_stats.htm](http://www.bis.org/statistics/about_gli_stats.htm).

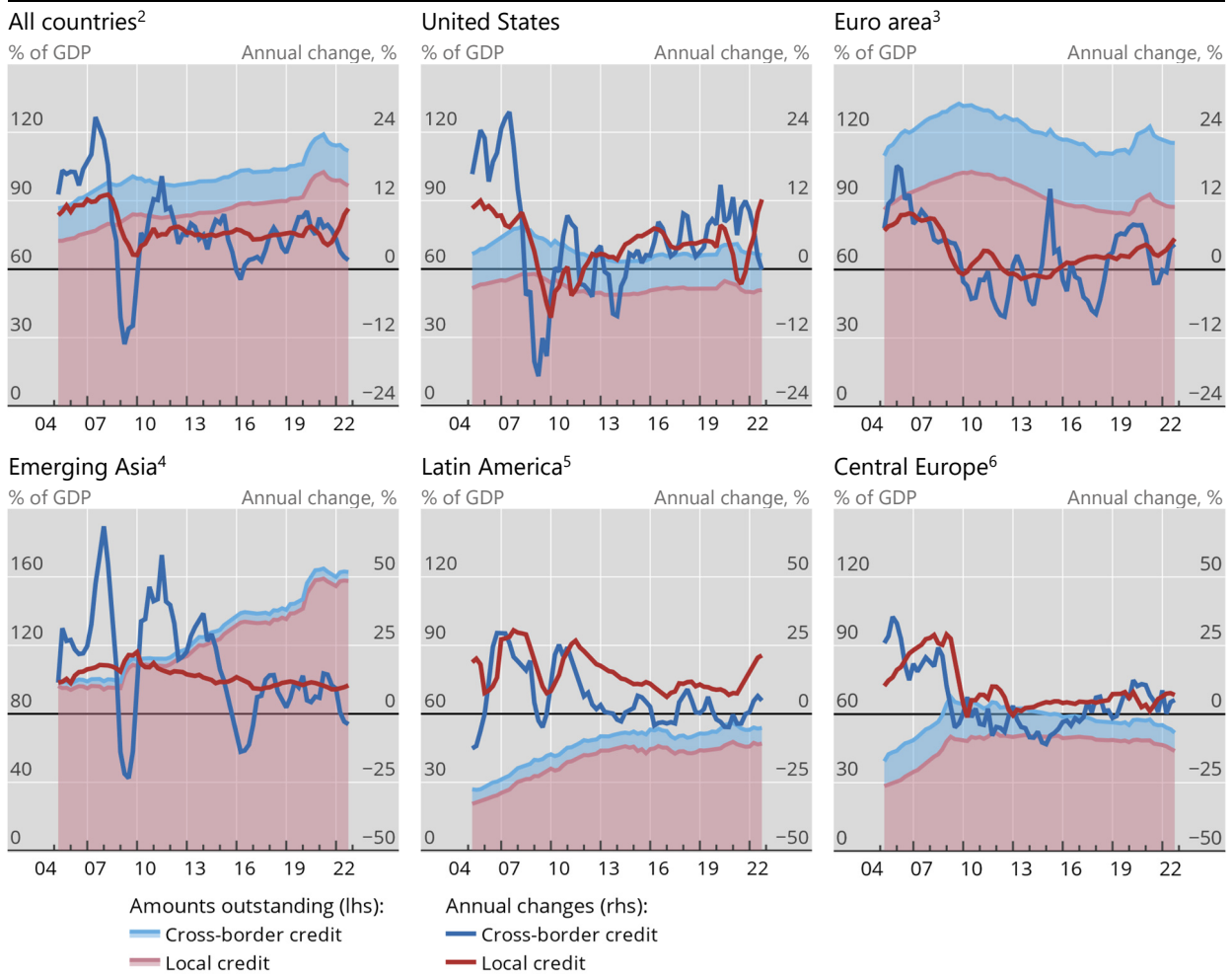
<sup>1</sup> Annual growth of US dollar-denominated credit to non-banks outside the United States. <sup>2</sup> Annual growth of the US dollar nominal effective exchange rate (NEER). An increase indicates an appreciation of the US dollar NEER.

Sources: Datastream; Dealogic; Euroclear; Thomson Reuters; Xtrakter Ltd; national data; BIS locational banking statistics; BIS effective exchange rate statistics; BIS calculations.

## Global bank credit to the private non-financial sector, by residence of borrower

Banks' cross-border credit plus local credit in all currencies<sup>1</sup>

Graph C.2



Further information on the BIS global liquidity indicators is available at [www.bis.org/statistics/about\\_gli\\_stats.htm](http://www.bis.org/statistics/about_gli_stats.htm).

<sup>1</sup> Cross-border claims of LBS-reporting banks to the non-bank sector plus local claims of all banks to the private non-financial sector. Weighted averages of the economies listed, based on four-quarter moving sums of GDP. <sup>2</sup> Australia, Canada, Denmark, Israel, Japan, New Zealand, Norway, Russia, Saudi Arabia, South Africa, Sweden, Switzerland, Turkey and the United Kingdom, plus the countries in the other panels. <sup>3</sup> Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain. <sup>4</sup> China, Hong Kong SAR, India, Indonesia, Korea, Malaysia, Singapore and Thailand. <sup>5</sup> Argentina, Brazil, Chile, Colombia and Mexico. <sup>6</sup> The Czech Republic, Hungary and Poland.

Sources: BIS statistics on credit to the non-financial sector; BIS locational banking statistics (LBS); BIS calculations.

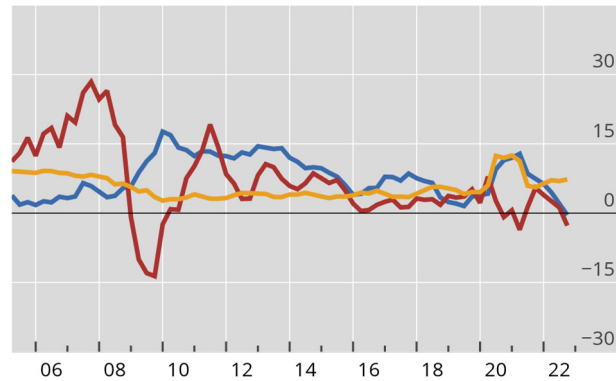
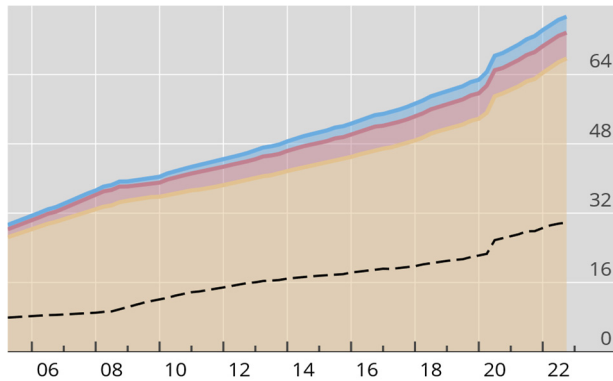
# Global credit to the non-financial sector, by currency

Graph C.3

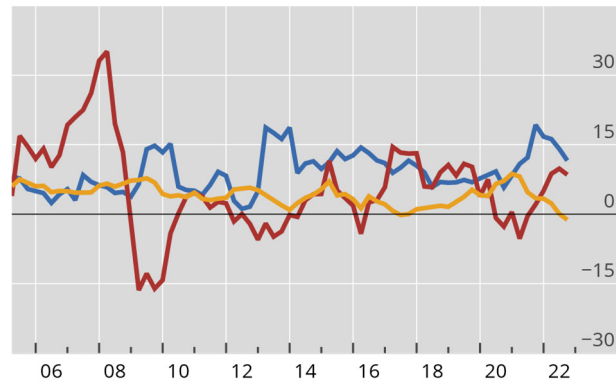
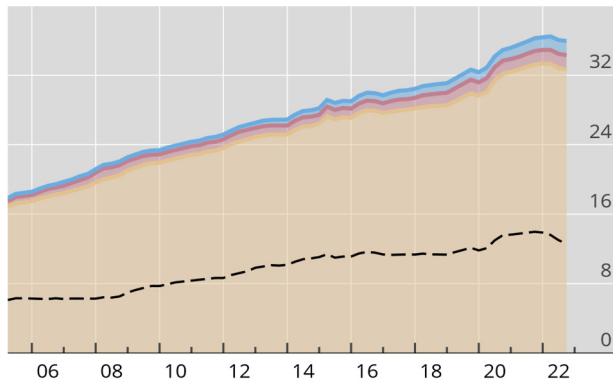
Amounts outstanding, in trillions of currency units<sup>1</sup>

Annual change, in per cent<sup>2</sup>

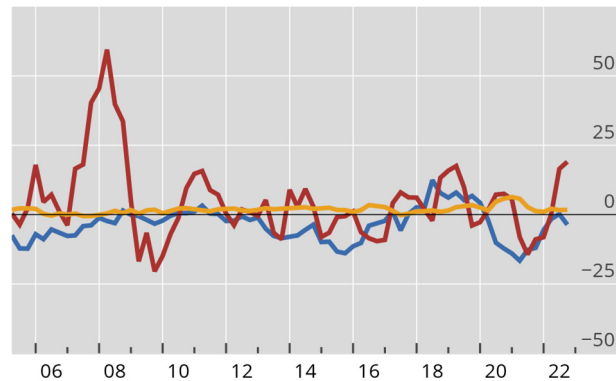
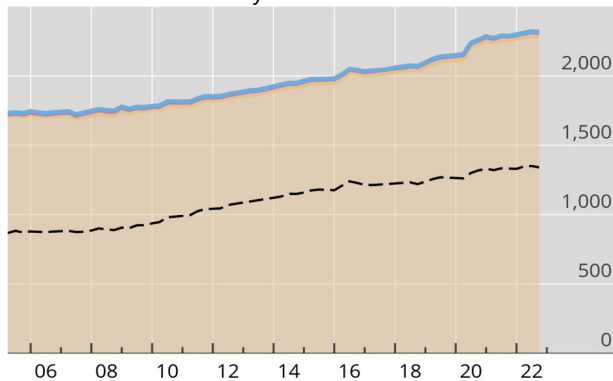
Credit denominated in US dollars



Credit denominated in euros



Credit denominated in yen



Credit to non-residents: Bank loans<sup>3</sup> (red), Debt securities<sup>4</sup> (blue)  
 Credit to residents:<sup>5</sup> Non-financial sector (tan), Of which: government (dashed line)

Credit to non-residents: Bank loans<sup>3</sup> (red), Debt securities<sup>4</sup> (blue)  
 Credit to residents:<sup>5</sup> All (yellow)

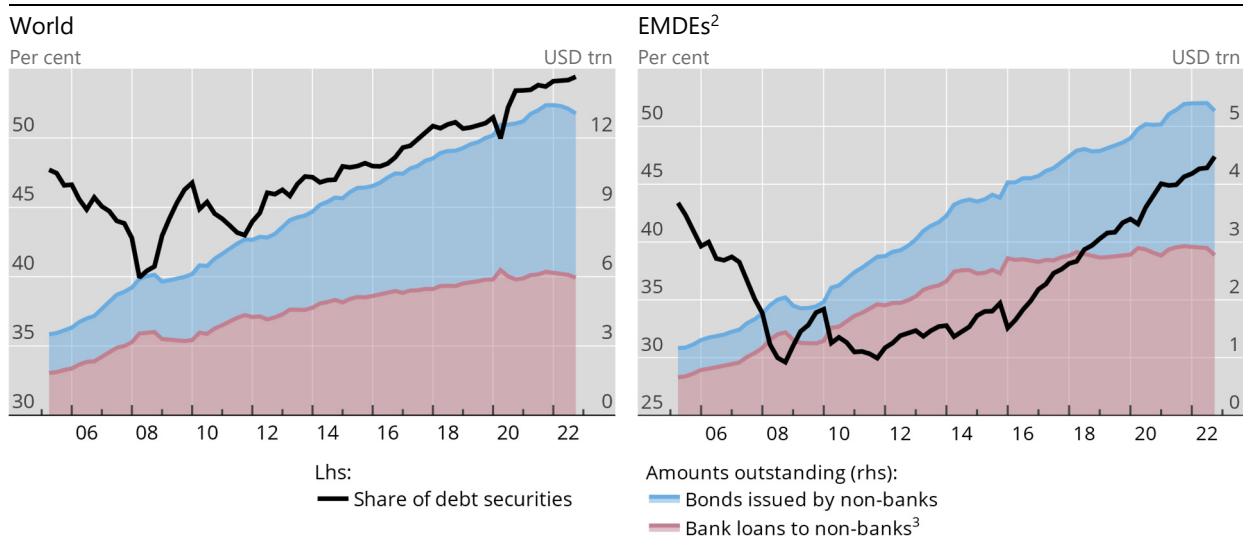
Further information on the BIS global liquidity indicators is available at [www.bis.org/statistics/about\\_gli\\_stats.htm](http://www.bis.org/statistics/about_gli_stats.htm).

<sup>1</sup> Amounts outstanding at quarter-end. <sup>2</sup> Based on quarterly break- and exchange rate-adjusted changes. <sup>3</sup> Loans by LBS-reporting banks to non-bank borrowers, including non-bank financial entities, comprise cross-border plus local loans. <sup>4</sup> Excluding debt securities issued by special purpose vehicles and other financial entities controlled by non-financial parents. Euro-denominated debt securities exclude those issued by institutions of the European Union. <sup>5</sup> Credit to non-financial borrowers residing in the United States / euro area / Japan. National financial accounts are adjusted using BIS banking and securities statistics to exclude credit denominated in non-local currencies.

Sources: Datastream; Dealogic; Euroclear; Thomson Reuters; Xtrakter Ltd; national data; BIS locational banking statistics (LBS); BIS calculations.

US dollar-denominated credit to non-banks outside the United States<sup>1</sup>

Graph C.4



Further information on the BIS global liquidity indicators is available at [www.bis.org/statistics/about\\_gli\\_stats.htm](http://www.bis.org/statistics/about_gli_stats.htm).

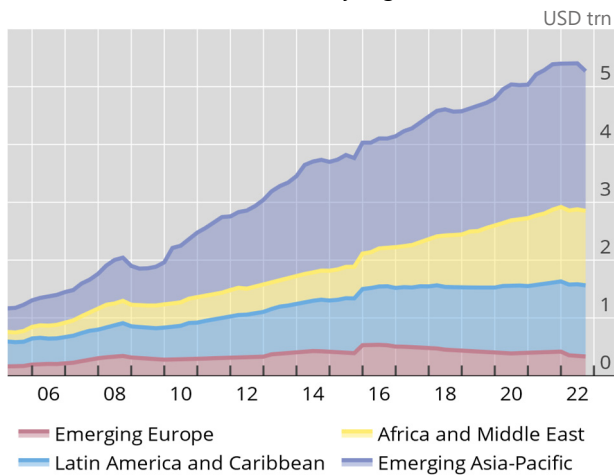
<sup>1</sup> Non-banks comprise non-bank financial entities, non-financial corporations, governments, households and international organisations. <sup>2</sup> From December 2022, this grouping has been aligned with the country classification in the BIS Annual Economic report, as detailed [here](#). <sup>3</sup> Loans by LBS-reporting banks to non-bank borrowers, including non-bank financial entities, comprise cross-border plus local loans.

Sources: Datastream; Dealogic; Euroclear; Thomson Reuters; Xtrakter Ltd; national data; BIS locational banking statistics (LBS); BIS calculations.

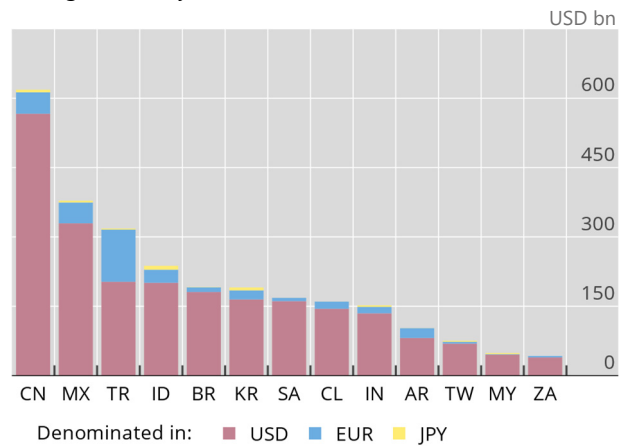
## Foreign currency credit to non-banks in EMDEs<sup>1</sup>

Graph C.5

### US dollar-denominated credit by region



### Foreign currency credit to selected EMDEs<sup>2</sup>



Further information on the BIS global liquidity indicators is available at [www.bis.org/statistics/about\\_gli\\_stats.htm](http://www.bis.org/statistics/about_gli_stats.htm).

<sup>1</sup> From December 2022, this grouping has been aligned with the country classification in the BIS Annual Economic report, as detailed [here](#). <sup>2</sup> Amounts outstanding for the latest available data.

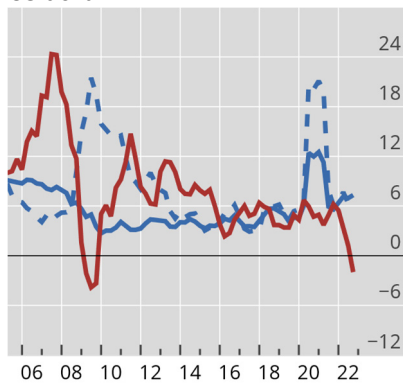
Sources: Datastream; Dealogic; Euroclear; Thomson Reuters; Xtrakter Ltd; national data; BIS locational banking statistics; BIS calculations.

## Credit to non-residents and residents

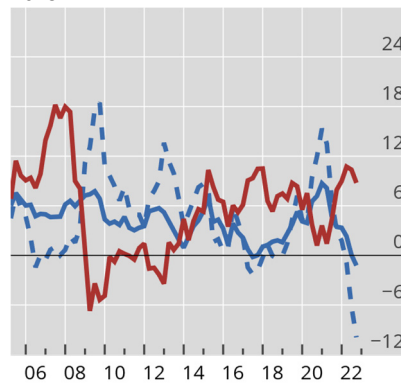
### Year-on-year change, in per cent

Graph C.6

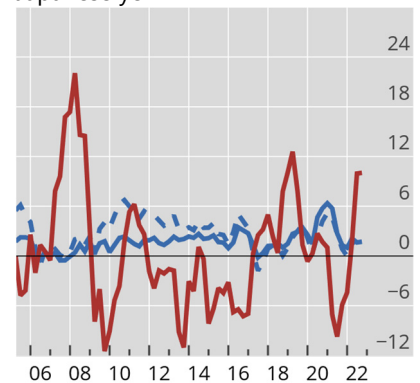
#### US dollar



#### Euro



#### Japanese yen



Credit to non-resident non-bank sector and resident non-financial sector.

Sources: Datastream; Dealogic; Euroclear; Thomson Reuters; Xtrakter Ltd; national data; BIS locational banking statistics (LBS); BIS calculations.