

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

- Banks' cross-border claims increased in Q2 2022 by \$782 billion, raising the year-on-year growth rate to 8%.<sup>1</sup> Derivatives valuations drove this increase, while new credit through loans and bond holdings rose a modest \$100 billion.
- Credit to emerging market and developing economies expanded by \$28 billion, despite the drops in credit to Brazil, China and Russia.
- Cross-border credit to Russia continued to fall, by more than \$4 billion, while liabilities to Russia saw the largest increase on record (+\$74 billion) as a result of blocked coupon and principal repayments following western sanctions.
- Credit denominated in euros and yen expanded, while credit in US dollars fell for the first time in a year (-\$332 billion), partly due to seasonal factors.
- Against the backdrop of rising interest rates, dollar borrowing by non-banks outside the United States via syndicated loans and bonds contracted in both Q2 and Q3, foreshadowing weaker growth in credit overall.

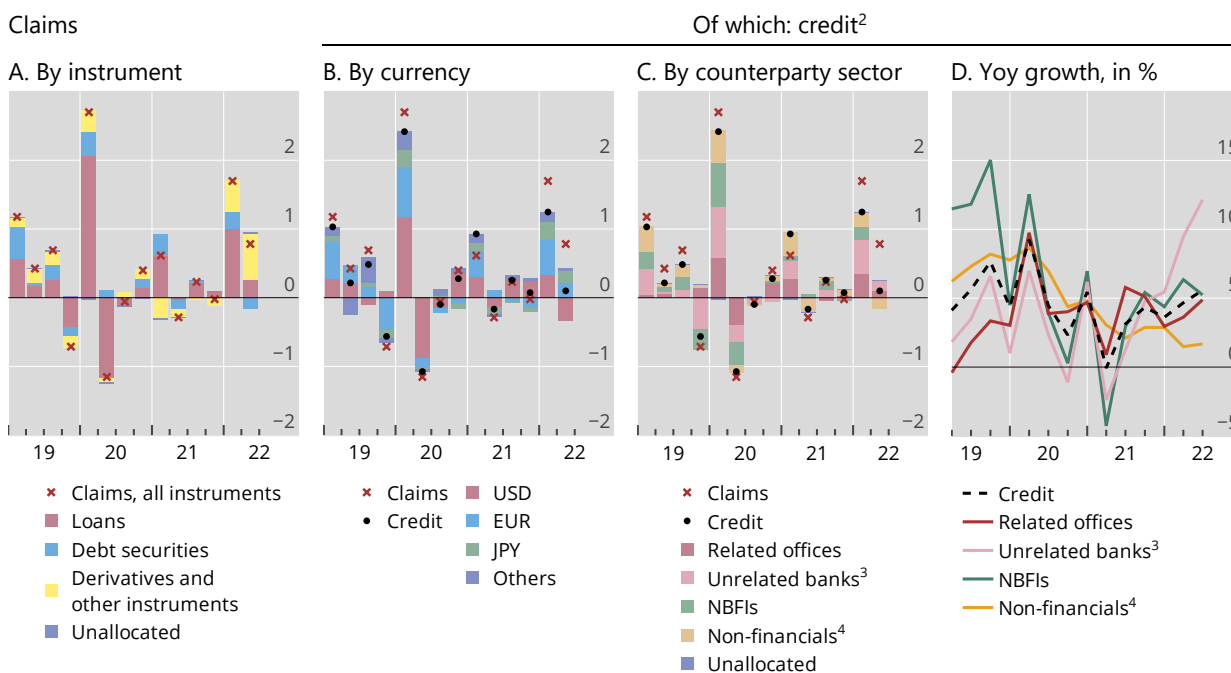
### Derivatives values surged, but bank credit was more muted

The BIS locational banking statistics (LBS) show that banks' cross-border claims expanded by \$782 billion during the second quarter of 2022 (+8% year-on-year (yoy)) on an FX- and break-adjusted basis (Graph 1.A).<sup>2</sup> This expansion was driven by an outsize rise in the market value of derivatives (+\$515 billion), especially those reported by banks in the euro area, against the backdrop of elevated uncertainty and market volatility (yellow bars). Excluding derivatives and other residual claims, the Q2 increase in bank credit – ie loans and holdings of debt securities – was more modest, at \$100 billion (+6% yoy).<sup>3</sup>

<sup>1</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 residual instruments (combined).

<sup>2</sup> The US dollar appreciated significantly against many major currencies during the quarter (by 7% vis-à-vis the euro, and 12% vis-à-vis the Japanese yen). This mechanically reduced outstanding stocks in other currencies when expressed in US dollars. Quarterly changes are thus reported on an adjusted basis, after removing exchange rate valuation effects and statistical breaks.

<sup>3</sup> The underlying expansion was slightly stronger, since seasonal factors tend to boost growth in Q1 of each year and dampen it in Q2, a pattern evident in Graph 1. The main reason is that the closing of banks' books tends to depress reported outstanding positions in the last quarter of the fiscal year, which for most banks ends in end-December (and end-March for Japanese banks).



<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> Includes credit to non-banks unallocated by subsector.

Source: BIS locational banking statistics.

### Market value of derivatives surged amidst market uncertainty

The market value of banks' cross-border derivatives positions surged in the second quarter (Graph 1.A). Part of this increase reflected greater *inter-office* derivatives claims (+\$190 billion), especially those denominated in euros and reported by banks in the euro area. This can arise when risks associated with derivatives portfolios are transferred across trading desks within the same consolidated banking group. In addition, cross-border derivatives claims vis-à-vis unaffiliated counterparties rose substantially, resulting in an overall jump in derivatives by \$515 billion in Q2, more than half vis-à-vis counterparties in the United Kingdom.

The BIS consolidated banking statistics (CBS), which track the consolidated positions of banks headquartered in a particular country, net of inter-office positions, suggest that these developments reflect elevated uncertainty and market volatility. Russia's invasion of Ukraine and changing expectations about the future path of monetary policy in major currencies led to sharp movements in the prices of financial instruments, pushing derivatives contracts "into the money" for either the reporting banks or their counterparties.<sup>4</sup> Derivatives with a positive market value reached

<sup>4</sup> If settled immediately, they would represent claims on (or liabilities to) counterparties. The unrealised gain arising from the difference between the initial contract price and the prevailing market price of the underlying assets is referred to as the "in-the-money" value. It leads to an increase in the positive (negative) market value of outstanding derivatives contracts, which are calculated as the sum of the replacement values of all contracts that are in a current gain (loss) position to the reporter at current market prices.

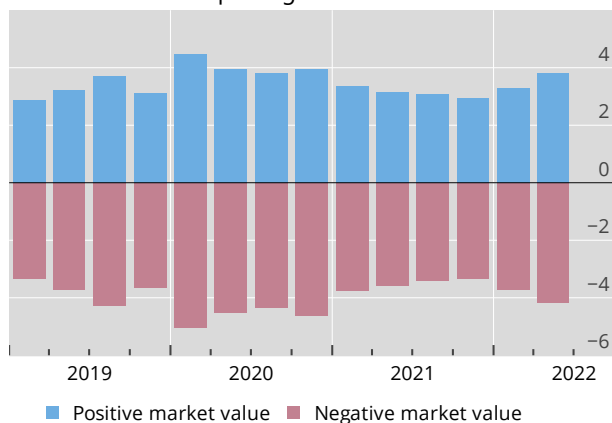
\$3.8 trillion by end-June (Graph 2.A), up 30% from end-2021, while those with a negative market value moved in tandem. Many reporting banks are market-makers recording large but offsetting derivatives positions on their balance sheets (Graph 2.B).

## Market value of banks' derivatives positions

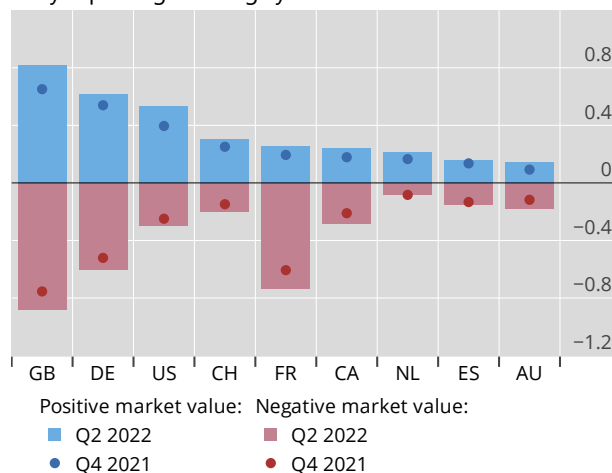
Outstanding amounts, in trillions of US dollars

Graph 2

### A. Positions of all reporting banks<sup>1</sup>



### B. By reporting banking system



<sup>1</sup> Derivatives with a positive market value are reported in the CBS on a guarantor basis (CBS/G). Derivatives with a negative market value are reported in the CBS on an immediate counterparty basis (CBS/I). In order to ensure consistency across the plotted positive and negative market value series, the reporting population for negative market value has been restricted to the set of countries which also report positive market values in the CBS/G.

Source: BIS consolidated banking statistics.

## Growth in cross-border bank credit muted in Q2

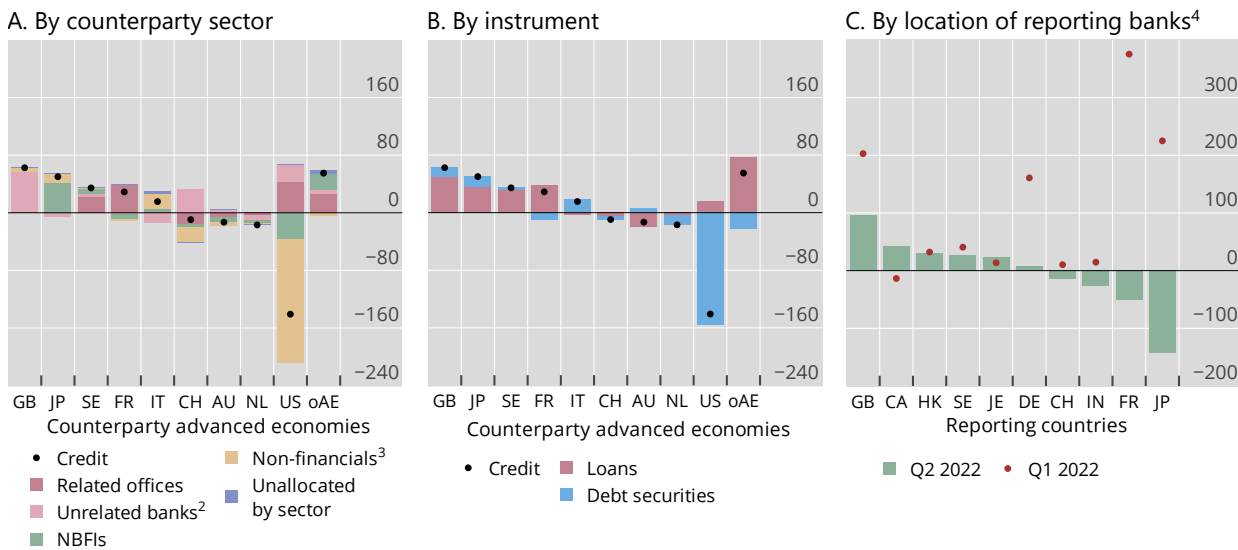
At \$100 billion, the Q2 expansion in cross-border bank credit (ie bank loans plus holdings of debt securities) was much smaller than that in claims overall. Credit was driven by greater interbank positions, mainly denominated in euros and yen. Interbank credit rose by \$250 billion overall, partly in the form of inter-office transfers (+\$105 billion). By contrast, credit to other sectors either declined (-\$154 billion to the non-financial sector), or stagnated (-\$4 billion to non-bank financial institutions (NBFIs)) (Graph 1.C). Using annual growth to look through the seasonal patterns shows that the growth rate of cross-border credit rose to 6% yoy, from 5% in Q1 (Graph 1.D).

Cross-border credit to advanced economies (AEs) rose modestly overall (+\$66 billion in Q2, +7% yoy). Stronger bank lending was partly offset by a drop in the reported value of debt securities holdings. Global banks reported greater credit to the United Kingdom (+\$62 billion) and a drop vis-à-vis the United States (-\$141 billion), partly reflecting the accounting practice of some banks of reappraising securities from market value in Q1 back to book value in Q2 (Graph 3).

## Cross-border credit to advanced economies in Q2 2022<sup>1</sup>

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 excluding from “total claims” all other instruments (derivatives with positive market value, equity and other residual instruments); oAE = other advanced economies. <sup>2</sup> Includes credit to central banks and to banks unallocated by subsector. <sup>3</sup> Includes credit to non-banks unallocated by subsector. <sup>4</sup> For reporting banks in Japan, claims in all instruments including trustee claims.

Source: BIS locational banking statistics.

## Credit to EMDEs up despite drops vis-à-vis key economies

Banks’ cross-border credit to emerging market and developing economies (EMDEs) increased by **\$28 billion** overall in Q2 (+2% yoy), but with large differences within regions (Graph 4.A). Credit to many countries in Latin America rose, but the \$14 billion drop in credit to Brazil resulted in an overall drop of \$5 billion to the region (Graphs 4.A and B). Credit to Africa and the Middle East rose by \$19 billion, extending a long spell of increases since 2014, particularly to countries in the Middle East. Credit to emerging Asia-Pacific expanded by \$8 billion, despite continued retrenchment from China – by \$23 billion in Q2, leading to a cumulative decline of \$114 billion over the past year (–12%). Mainly Chinese banks operating outside China continued to reduce their claims on the mainland (Graph 4.C). In the rest of the Asia-Pacific region, credit to Korea expanded the most (+\$21 billion), followed by Pakistan and Indonesia.

The CBS shed more light on how banking systems’ exposures to China have evolved recently. Non-Chinese banks’ foreign claims on China fell by **\$32 billion** in Q2 2022, or by \$68 billion over one year (–7%) (Graph 5.A).<sup>5</sup> Their claims on banks in China declined the most, followed by claims on the official sector (Graph 5.B). Separately, foreign banks’ other potential exposures to China fell by \$26 billion (Graph 5.C).

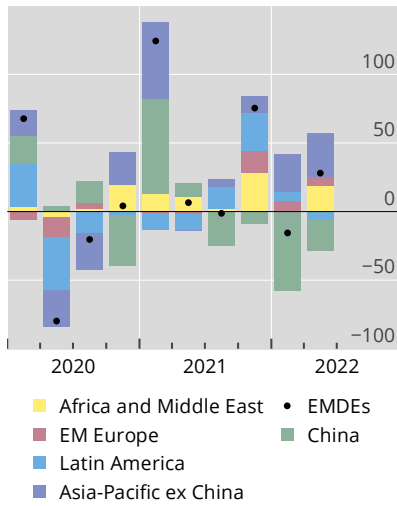
<sup>5</sup> Foreign claims include banks’ cross-border claims as well as the local claims booked by their affiliates located in the borrowing country. However, fewer reporting countries report the CBS than the LBS: several major emerging market and developing economies (notably China and Russia) do not report the CBS.

## Changes in cross-border credit to EMDEs

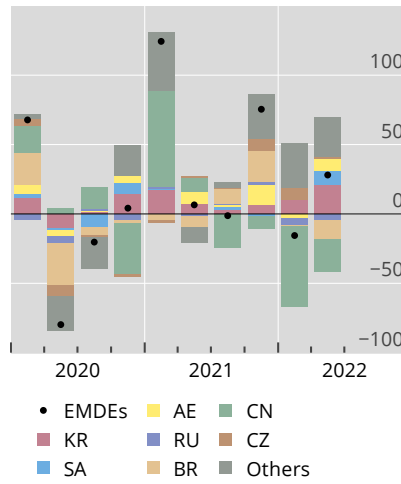
Quarterly FX- and break-adjusted changes, in billions of US dollars

Graph 4

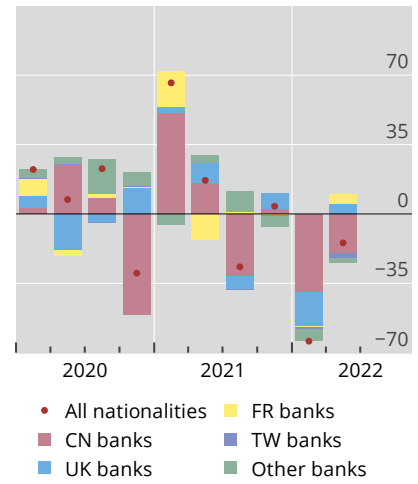
A. By counterparty region



B. Selected counterparty countries



C. Claims on China, by bank nationality<sup>1</sup>



<sup>1</sup> The countries shown are the ones with the largest adjusted changes in the latest quarter.

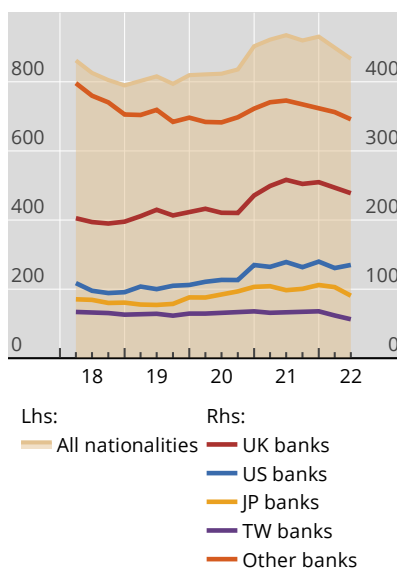
Source: BIS locational banking statistics (by residence and by nationality).

## CBS reporting banks' consolidated exposures to China

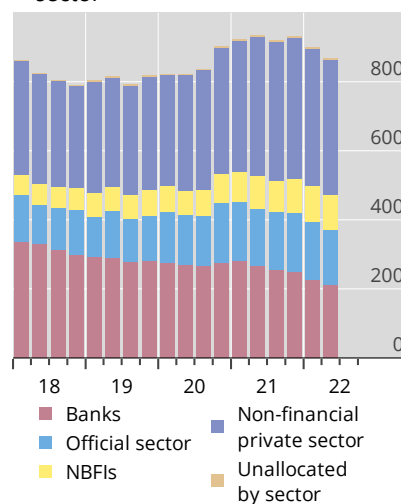
Outstanding amounts, in billions of US dollars

Graph 5

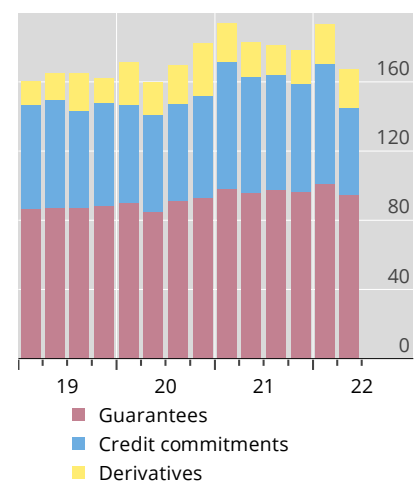
A. Foreign claims, by banking system



B. Foreign claims, by counterparty sector



C. Other potential exposures



Source: BIS consolidated banking statistics on a guarantor basis (CBS/G).

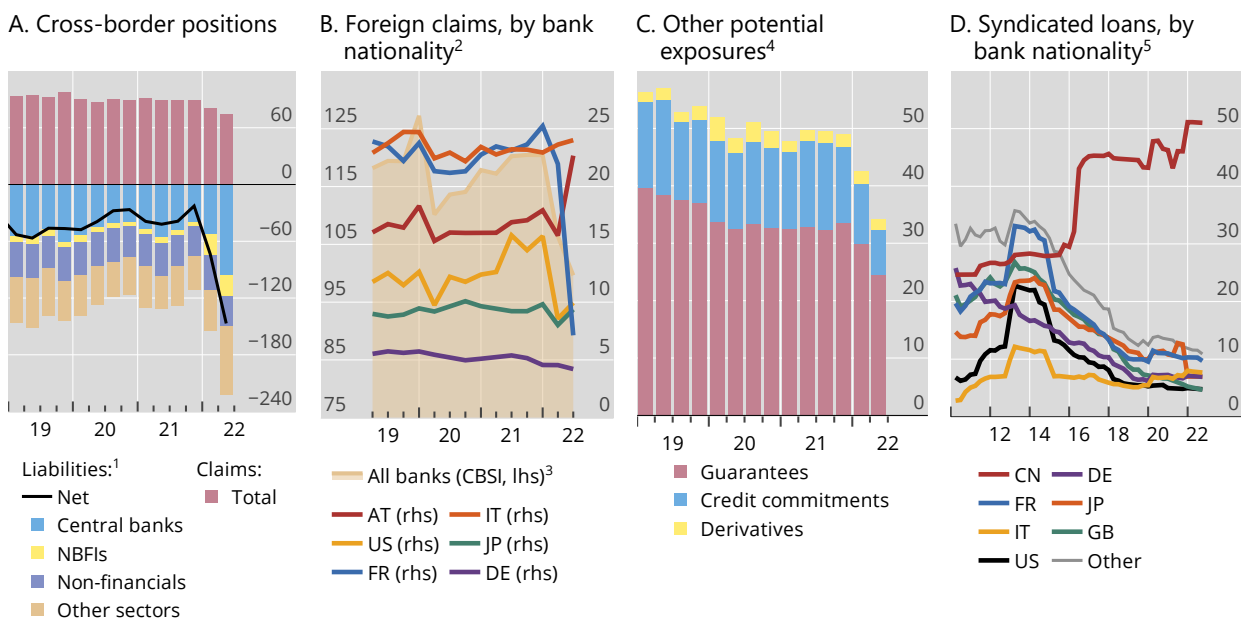
Emerging Europe continued to attract cross-border credit in Q2 (+\$6 billion) (Graph 4.A). Over the past year, the region received credit amounting to \$29 billion (+7%), of which Czechia accounted for the bulk (\$20 billion), followed by Hungary (+\$8 billion) and Poland (+\$5 billion), while credit to Turkey had fallen by \$3 billion. In the latest quarter, Poland, Turkey and Czechia each attracted more than \$1.5 billion in new bank credit.

Banks in most countries continued to reduce cross-border credit to Russia, but some reported a surge in liabilities to Russia (Graph 6.A). Banks reduced their cross-border credit to borrowers in Russia by \$4.5 billion, following a similar decline in Q1 (red bars).<sup>6</sup> At the same time, they recorded a surge in cross-border liabilities: the \$74 billion increase was the largest on record, with the bulk accounted for by liabilities to the Central Bank of the Russian Federation following western sanctions. For example, Euroclear Bank publicly reported a €72 billion rise in liabilities at the end of June 2022 that resulted from the accumulation of blocked coupon payments and redemptions on its balance sheet.<sup>7</sup> BIS reporting banks' net cross-border liabilities (liabilities minus claims) to Russia thus doubled in Q2 alone, to \$147 billion (Graph 6.A, black line).

## Foreign and cross-border exposures to Russia

Outstanding amounts, in billions of US dollars

Graph 6



<sup>1</sup> Liabilities (by counterparty sector) are shown as negative figures on the vertical scale. <sup>2</sup> Foreign claims by individual nationalities are on a guarantor basis. <sup>3</sup> On an immediate counterparty basis (CBS/I). <sup>4</sup> On a guarantor basis (CBS/G). <sup>5</sup> Lines track the cumulative outstanding amount of cross-border syndicated loans originated by banks of the nationalities listed in the legend. Banks may sell these loans after origination, and thus the cumulative outstanding amounts are not necessarily the amounts carried on banks' balance sheets.

Sources: Dealogic; BIS consolidated and locational banking statistics.

<sup>6</sup> The BIS ceased receiving data submissions from the reporting 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.

<sup>7</sup> [www.euroclear.com/newsandinsights/en/press/2022/2022-mr-13-euroclear-delivers-a-strong-performance-for-h1-2022.html](http://www.euroclear.com/newsandinsights/en/press/2022/2022-mr-13-euroclear-delivers-a-strong-performance-for-h1-2022.html).

The CBS provide a more comprehensive view of banks' consolidated exposures to Russia and how they have evolved since early 2022. Reporting banks' combined foreign claims on Russia fell by \$7 billion in Q2 to \$100 billion, following a drop of \$14 billion in Q1 (Graph 6.B).<sup>8</sup> The drop was due to French banks (-\$15 billion).<sup>9</sup> The positions of other banking systems remained broadly stable, while claims of Austrian banks actually rose by \$7 billion as the rouble recovered 30% of its value in Q2. Banks' other potential exposures to Russia continued to decline (Graph 6.C).

While Chinese authorities do not report the CBS, other data sources suggest that Chinese banks may have maintained or stepped up their credit to borrowers in Russia in the first three quarters of 2022 (Graph 6.D). For instance, outstanding syndicated loans derived from Dealogic data show that loans originated by Chinese banks up to September 2022 remained high at \$51 billion, accounting for over 40% of the global total of syndicated loans to Russia. These developments echo those seen in the mid-2010s, as Chinese banks expanded their syndicated loans to Russia following a retreat by banks from other countries after the imposition of sanctions on Russia in 2014.

<sup>8</sup> The outstanding foreign claims of \$100 billion (CBSI) are more than the \$85 billion reported on a guarantor basis (CBSG), which is adjusted for collateral, guarantees and other credit risk mitigants. The stocks reflect changes in exposure and in valuation.

<sup>9</sup> French banks' local claims on residents of Russia dropped by \$15 billion, primarily due to a divestiture by Société Générale (see [www.societegenerale.com/en/news/press-release/cession-russian-activities](http://www.societegenerale.com/en/news/press-release/cession-russian-activities)).

## Global liquidity indicators at end-June 2022

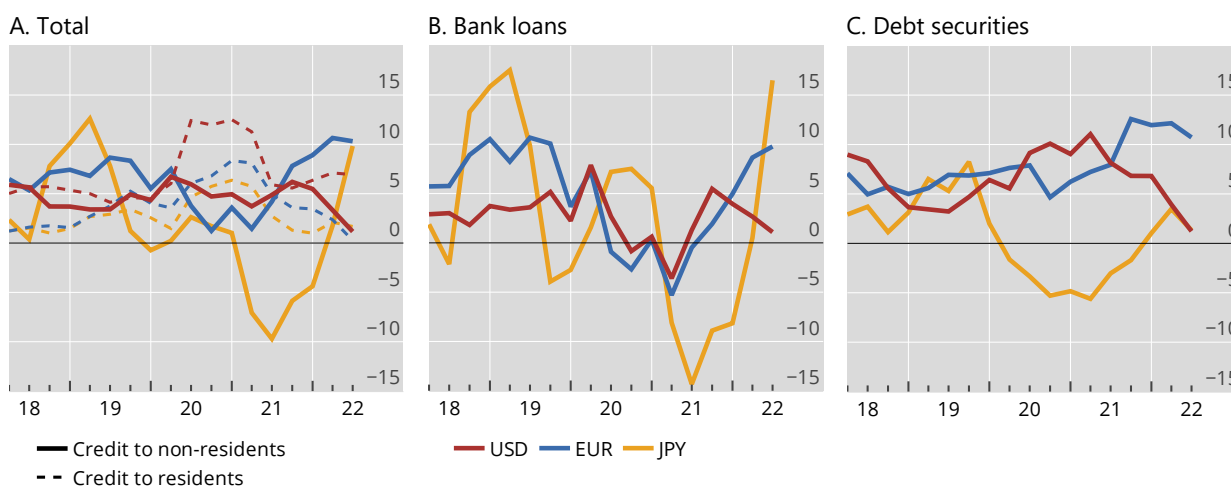
The BIS global liquidity indicators (GLIs) track credit to non-bank borrowers, covering both loans extended by banks and funding from global bond markets through the issuance of international debt securities (IDS). The main focus is on foreign currency credit denominated in three major reserve currencies (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 Q2 2022, foreign currency credit denominated in US dollars contracted while that in euros expanded. As a result, yoy growth rates diverged further (Graph 7.A). Dollar credit to non-bank borrowers outside the United States stood at \$13.3 trillion at quarter-end, only 1% higher than a year earlier (Annex Graph C.4). Growth in euro credit to non-bank borrowers outside the euro area remained strong at 10% yoy, pushing the amount outstanding to €3.9 trillion (\$4.1 trillion). Yen credit to non-bank borrowers outside Japan accelerated to 10% yoy through a jump in bank loans (16% yoy) (Graph 7.B). Increased yen lending, by both Japanese and other banks, pushed the stock of credit to ¥49.8 trillion (\$0.37 trillion). In all three currencies, the issuance of IDS slowed down (Graph 7.C).

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

Year-on-year changes, in per cent

Graph 7



<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. 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.

Foreign currency credit to non-banks in emerging market and developing economies (EMDEs) also weakened in dollars but accelerated in euros (Graph 8.A). This left the respective stocks at \$4.2 trillion (Table E2-USD) and €0.8 trillion (Table E2-EUR). Dollar credit to EMDEs declined by \$7 billion during Q2 2022 after six consecutive quarterly expansions (Graph 8.B). Dollar credit to non-banks in Asia-Pacific fell the most (-\$13 billion), mainly reflecting lower credit to borrowers in China (-\$21 billion), followed by those in emerging Europe (-\$3 billion). By contrast, credit

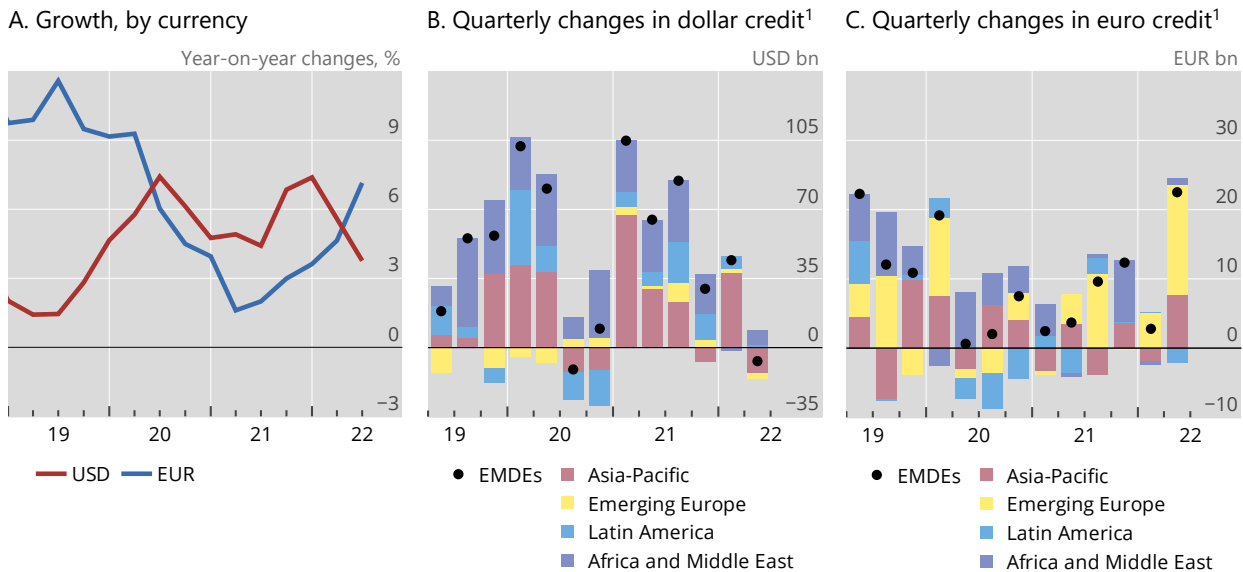
<sup>10</sup> For more details, see the GLI methodology: [www.bis.org/statistics/gli/gli\\_methodology.pdf](http://www.bis.org/statistics/gli/gli_methodology.pdf).



to borrowers in Africa and the Middle East (+\$7 billion) and in Latin America (+\$2 billion) grew. In contrast to dollar credit, growth in euro credit to EMDEs gained momentum (Graph 8.C). Euro-denominated loans grew by €23 billion in Q2, whereas net issuance of IDS (gross issuance minus redemptions) added little. Borrowers residing in emerging Europe received most of the new euro credit (+€16 billion), followed by Asia-Pacific (+€8 billion). The only region that saw a contraction was Latin America (–€2 billion), mainly on account of Mexico (–€2 billion).

## Foreign currency credit to EMDEs

Graph 8



<sup>1</sup> Quarterly changes are adjusted for breaks in series and exchange rate fluctuations. 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.

Looking ahead, high inflation and rising interest rates in many jurisdictions may have a significant impact on foreign currency credit to EMDEs and advanced economies (AEs). Persistent dollar strength can pose balance sheet challenges to dollar borrowers whose assets or revenues are in local currencies. While the GLI data for Q3 2022 will be available only in January 2023, data from Dealogic can provide timelier (if partial) insights in the meantime.

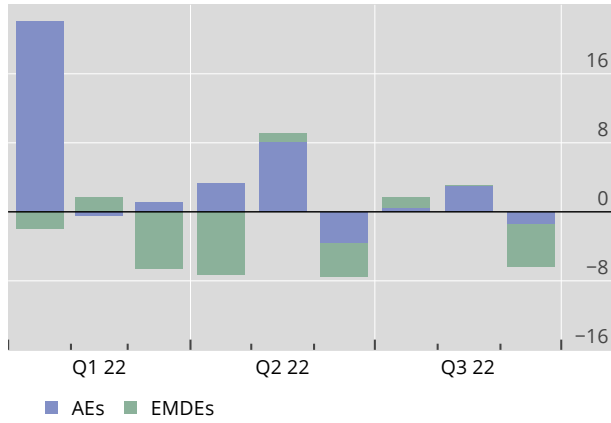
Overall, these data foreshadow a further slowdown of dollar financing in Q3, for bonds as well as for term loans (Graph 9). Weakness in dollar credit in Q2 continued into the third quarter, especially for debt issuance by non-financial corporates (NFCs) in AEs (Graph 9, purple bars). Issuance by these firms dropped markedly in Q2 (–\$18 billion), and the downward trend in issuance continued into Q3, with July (–\$4 billion), August (–\$6 billion) and September (–\$12 billion) data pointing to further slowdown. As regards NFCs in EMDEs (green bars), Q3 data suggest a cumulative decline (–\$9 billion) in the outstanding stock of dollar debt between July and September.

# Net issuance of US dollar-denominated debt by non-financial corporates<sup>1</sup>

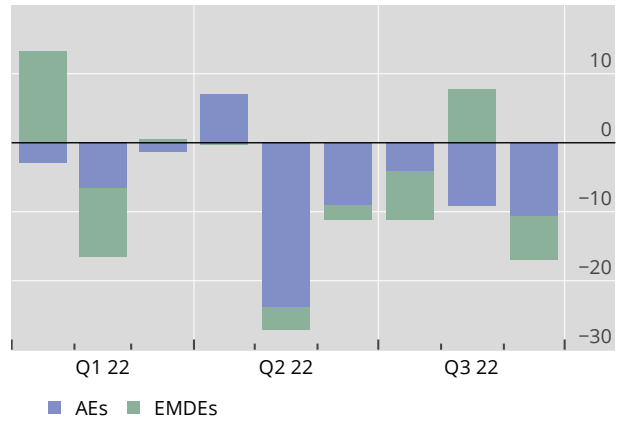
Monthly net issuance, in billions of US dollars

Graph 9

## A. Syndicated term loans



## B. Debt securities



<sup>1</sup> On an immediate borrower sector basis, by residence of borrowers. Excludes US dollar-denominated loans to and debt securities issued by borrowers in the United States.

Sources: Dealogic; BIS calculations.

## Annex A Locational banking statistics graphs

Cross-border claims by sector, currency and instrument

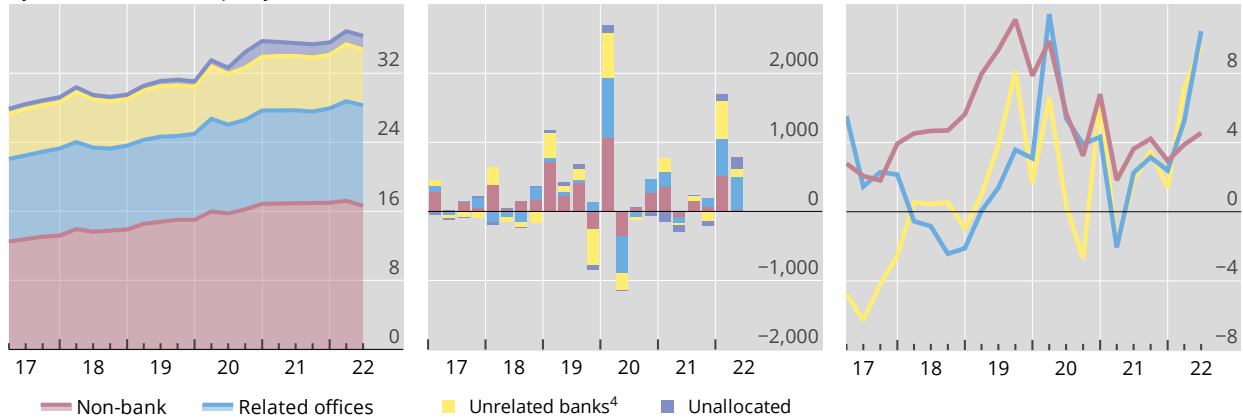
Graph A.1

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

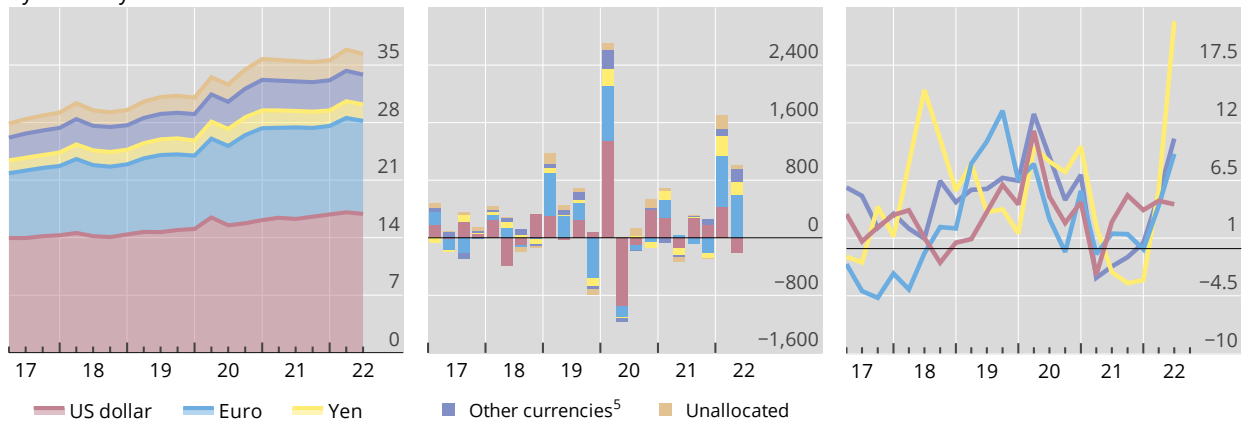
Adjusted changes, in USD bn<sup>2</sup>

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

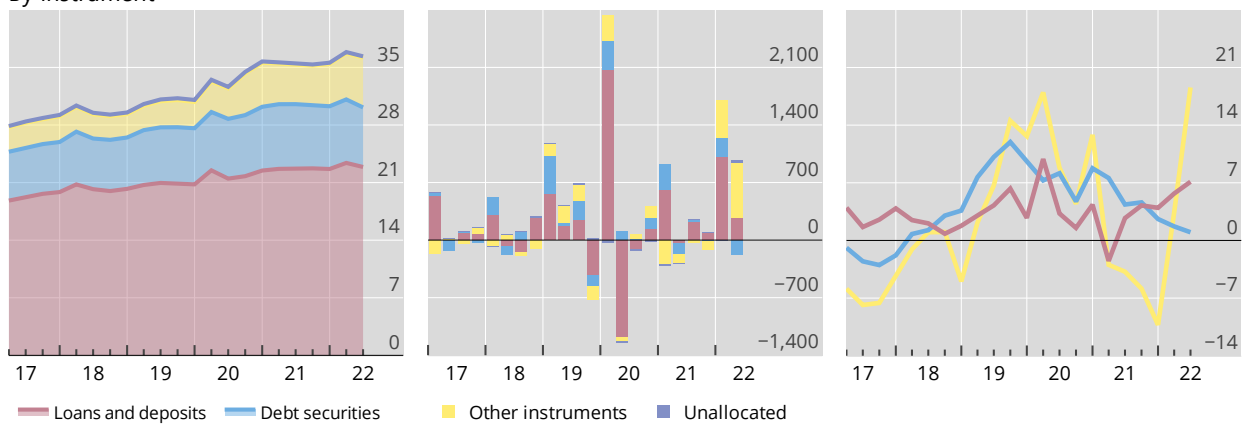
By sector of counterparty



By currency



By instrument



<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

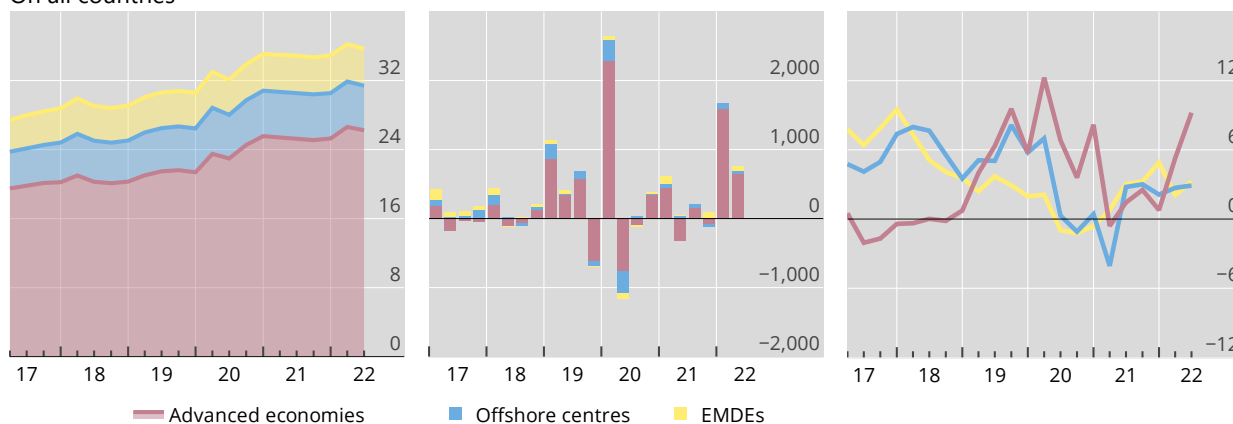
Graph A.2

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

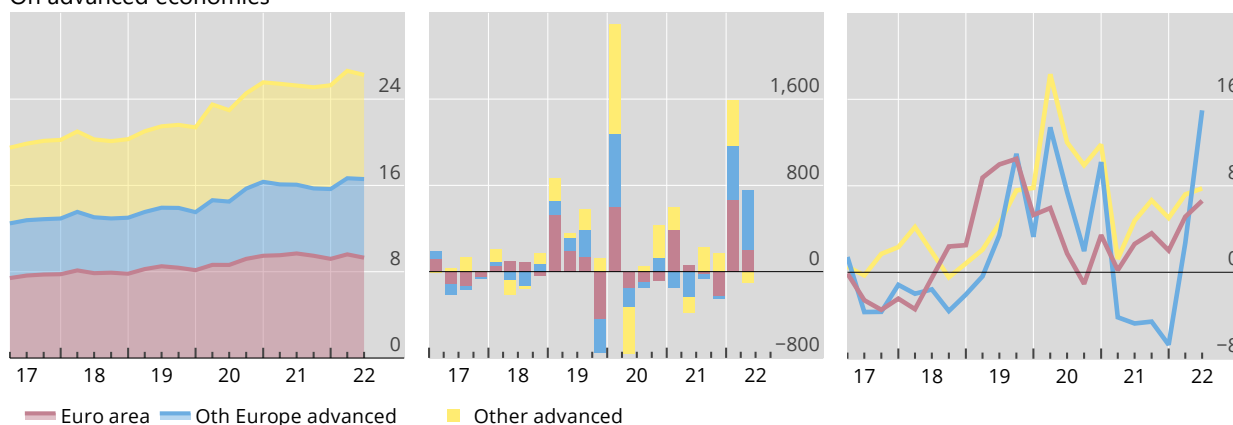
Adjusted changes, in USD bn<sup>2</sup>

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

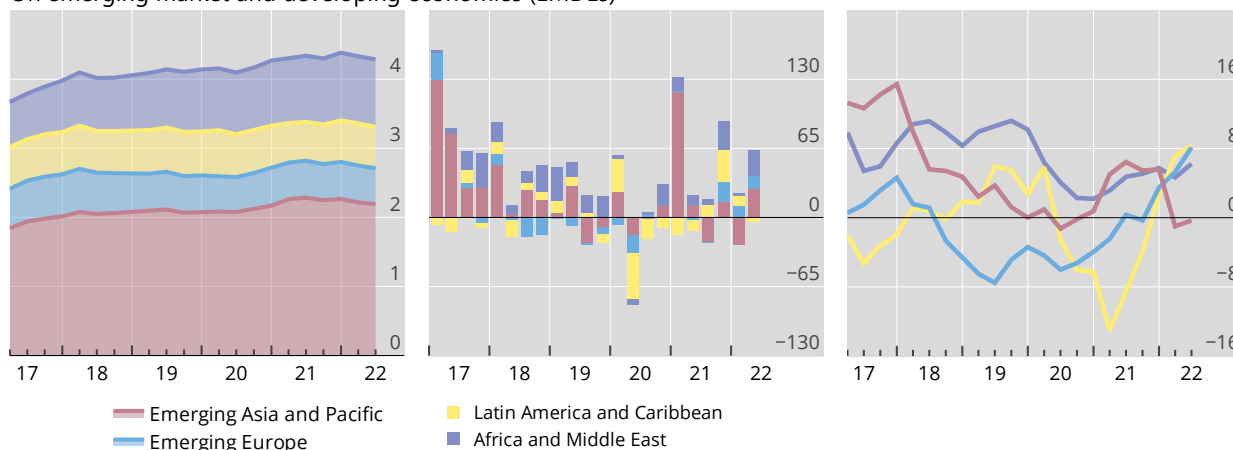
On all countries



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

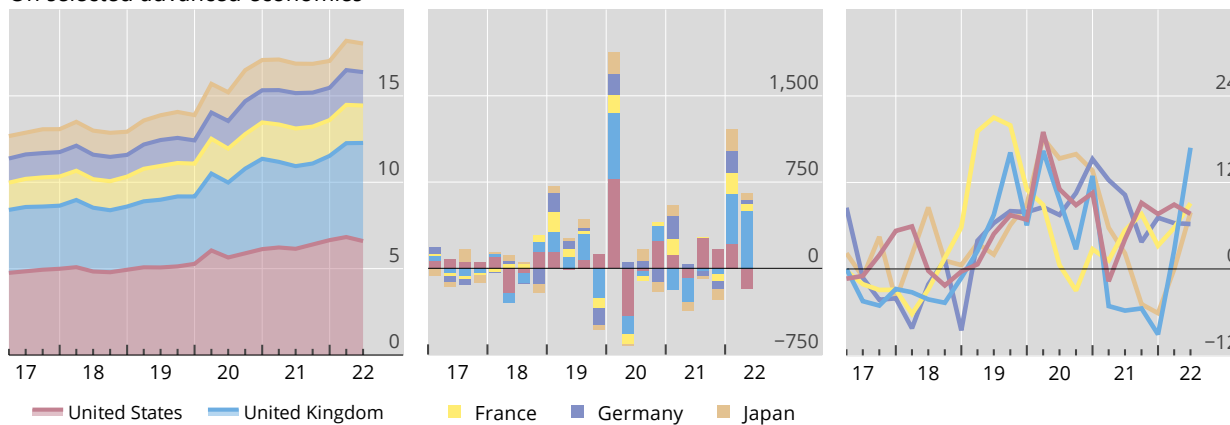
Graph A.3

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

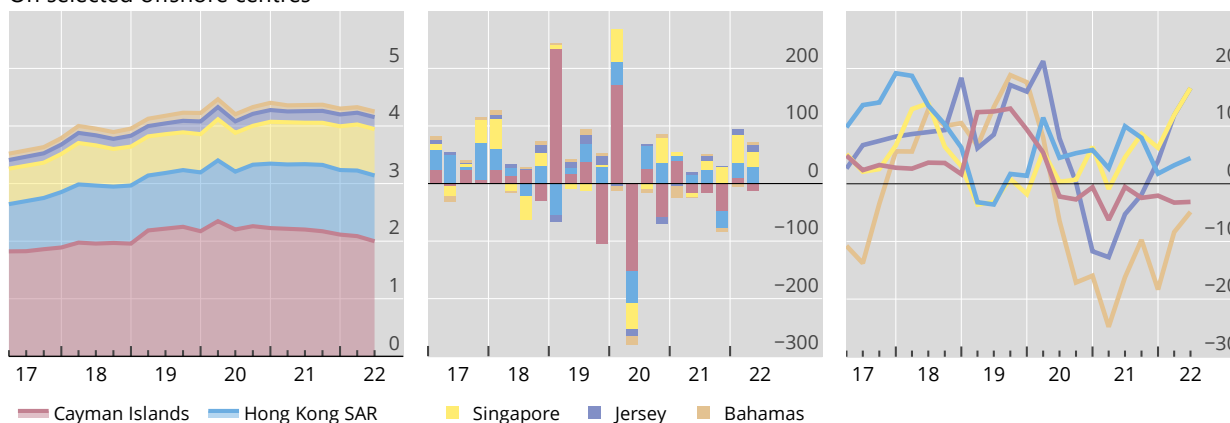
Adjusted changes, in USD bn<sup>2</sup>

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

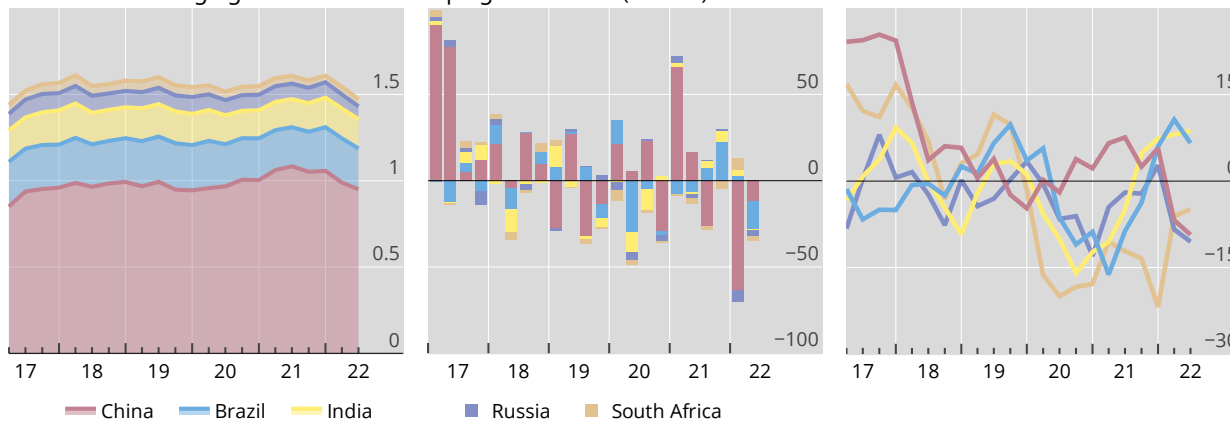
On selected advanced economies



On selected offshore centres



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).

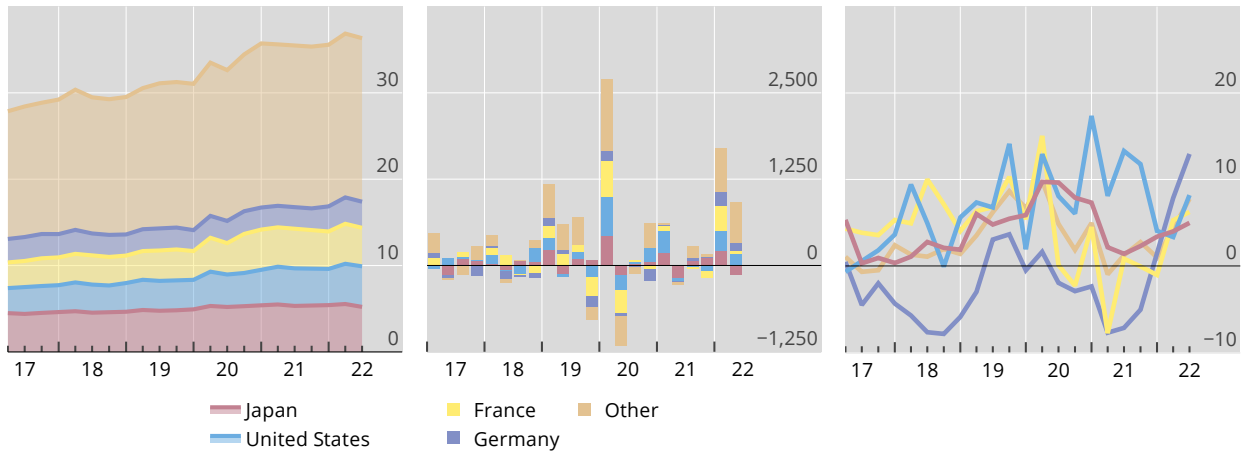
Cross-border claims by nationality of reporting bank and currency of denomination Graph A.4

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

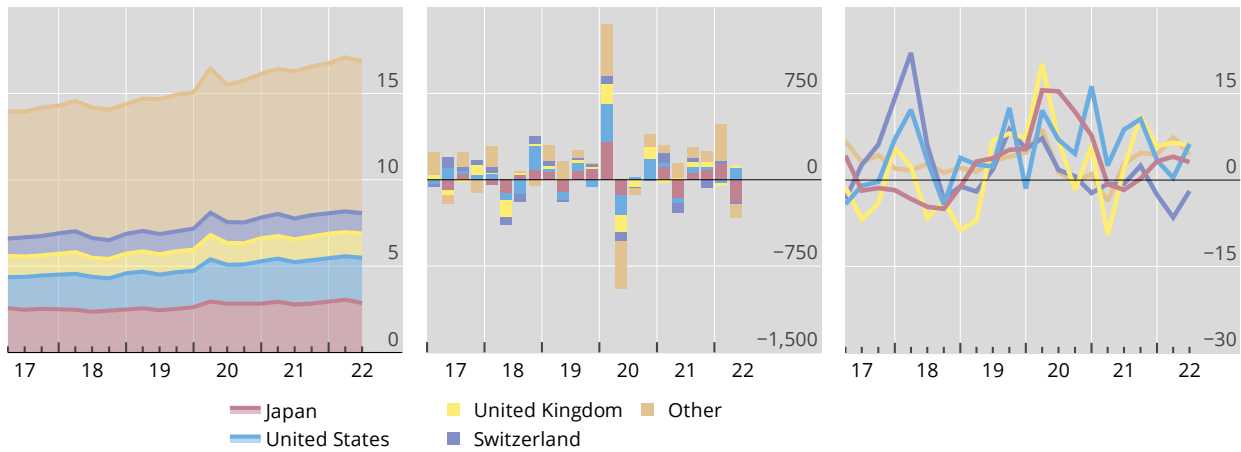
Adjusted changes, in USD bn<sup>2</sup>

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

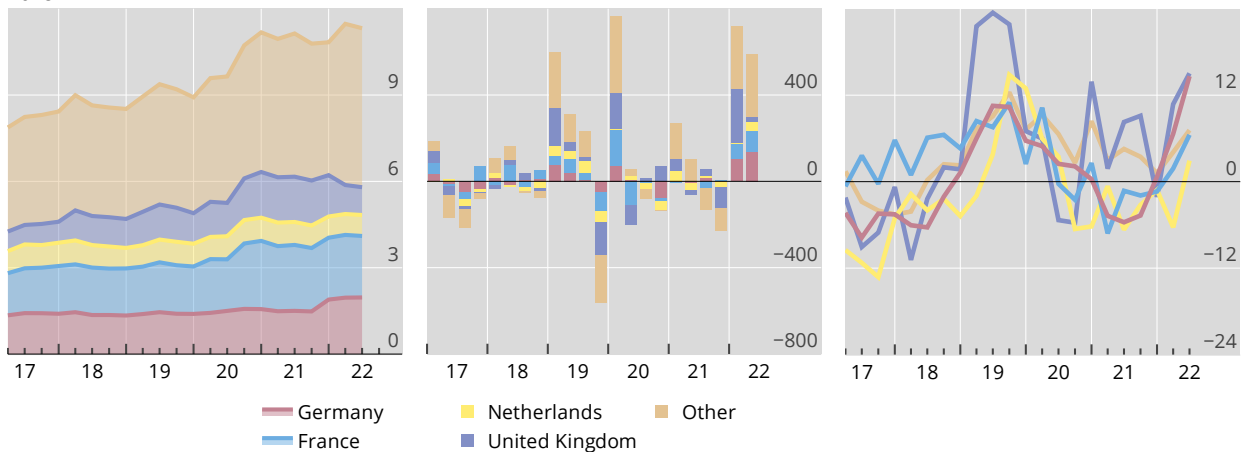
All currencies



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

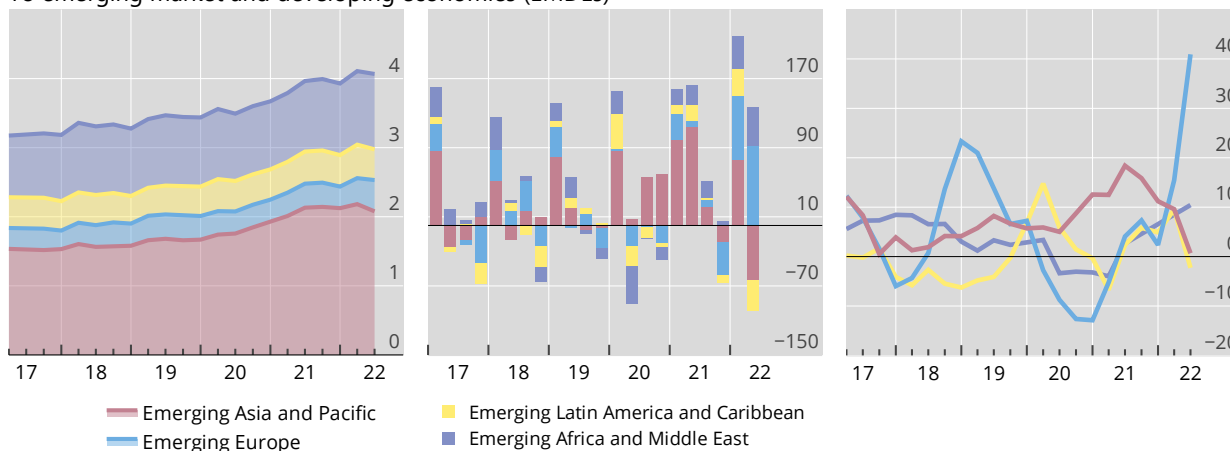
Graph A.5

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

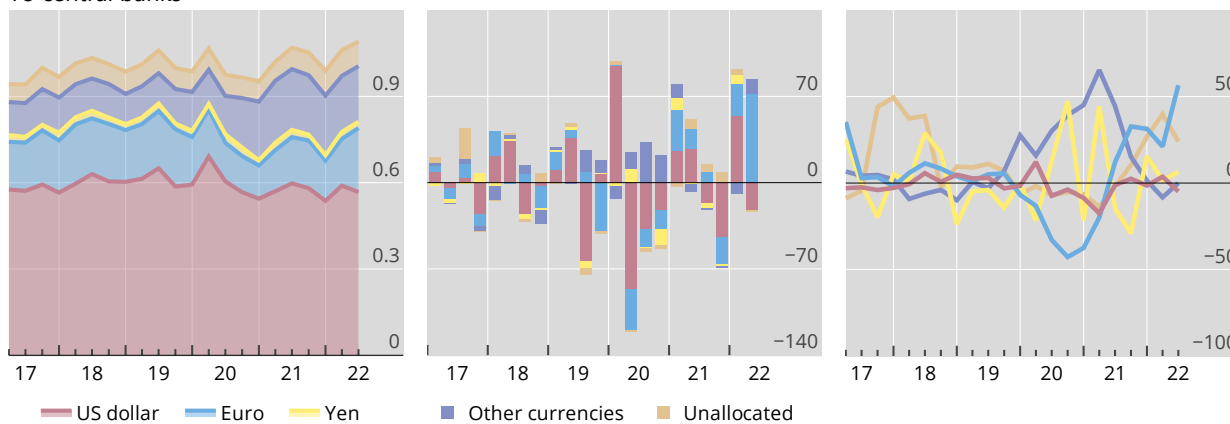
Adjusted changes, in USD bn<sup>2</sup>

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

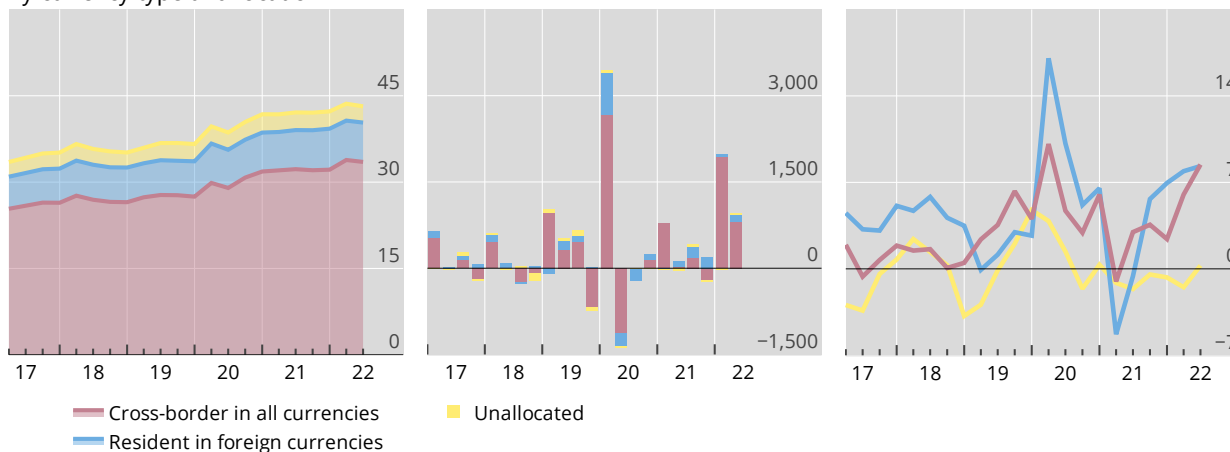
To emerging market and developing economies (EMDEs)



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

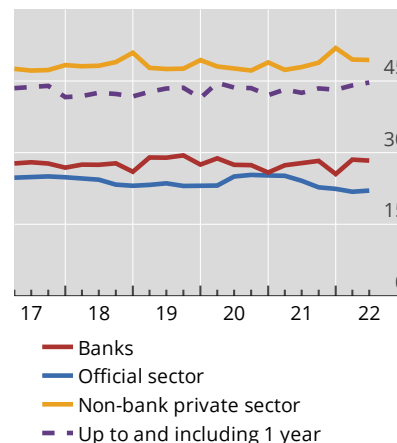
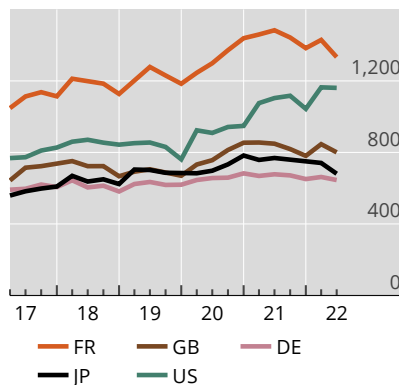
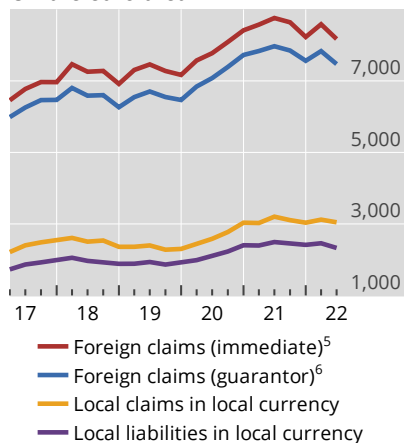
Graph B.1

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

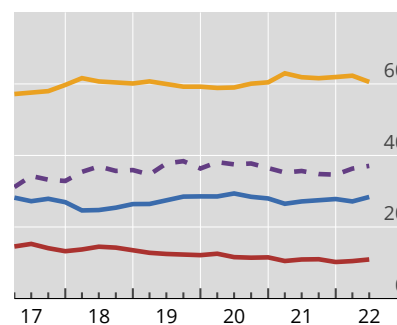
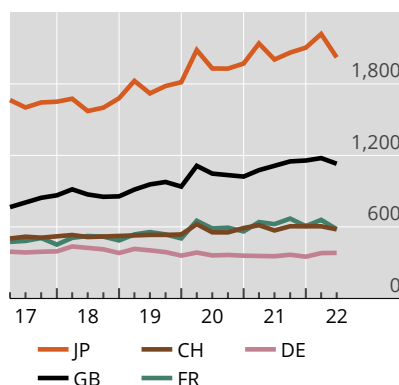
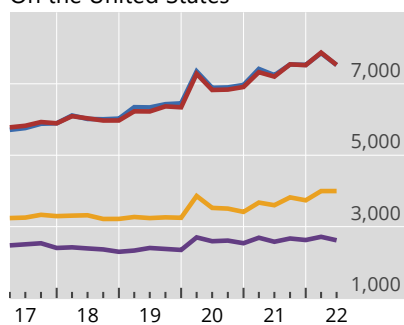
Foreign claims of selected creditors,  
in USD bn<sup>1,3</sup>

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

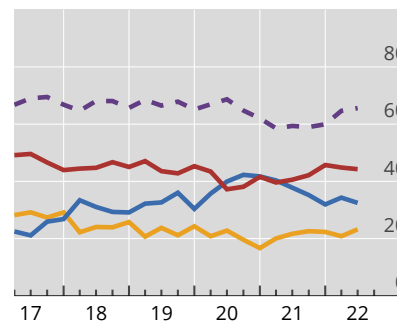
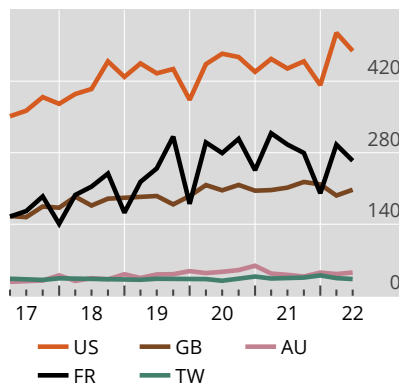
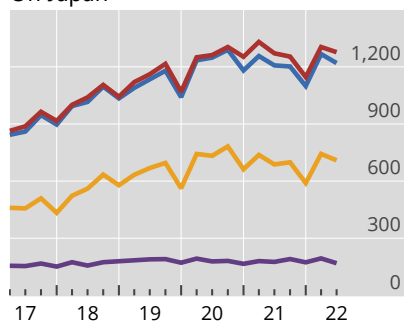
On the euro area



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)

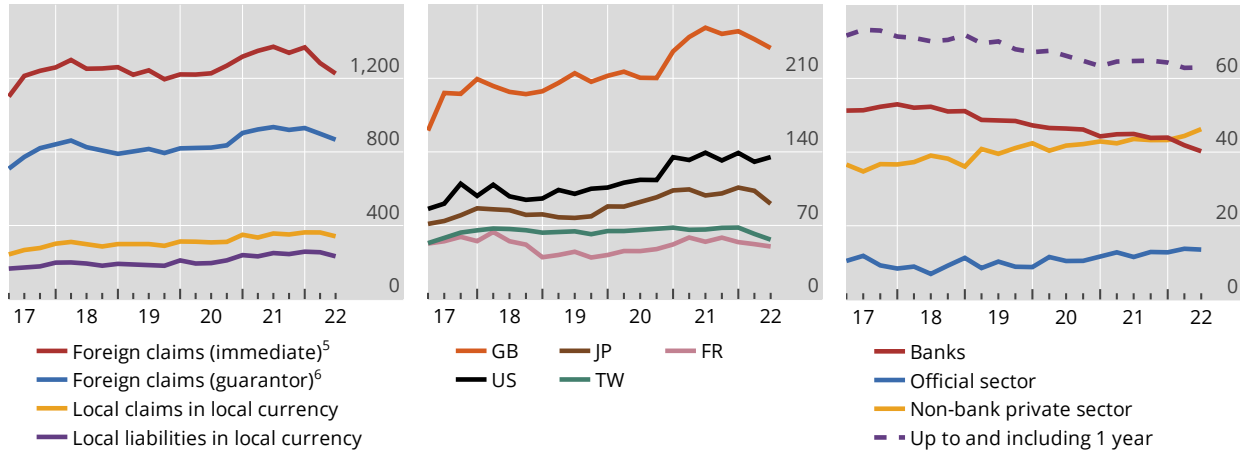
Graph B.2

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

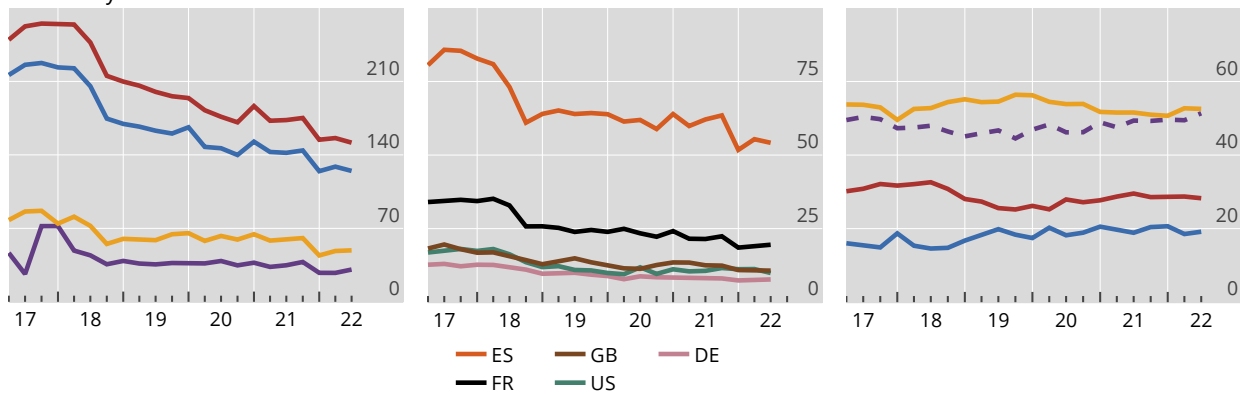
Foreign claims of selected creditors, in USD bn<sup>1,3</sup>

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

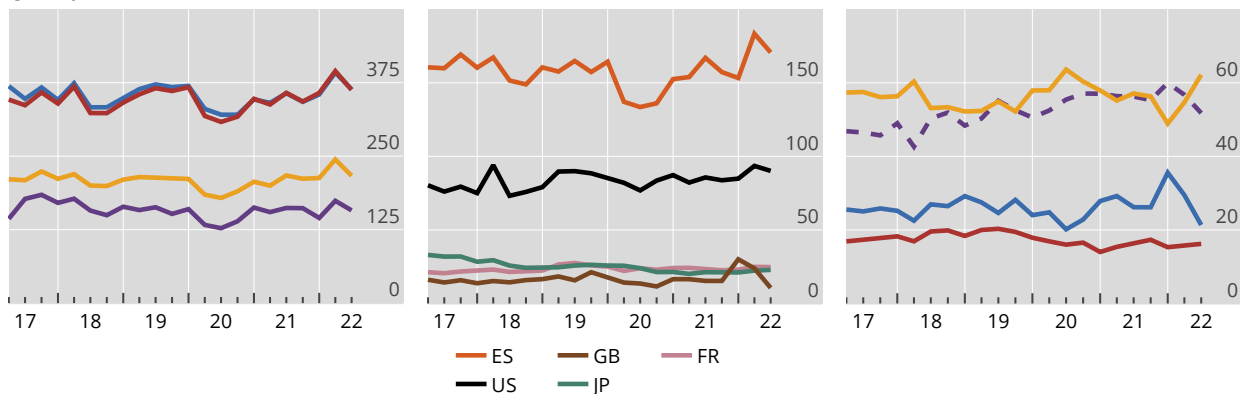
On China



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, 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. <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.

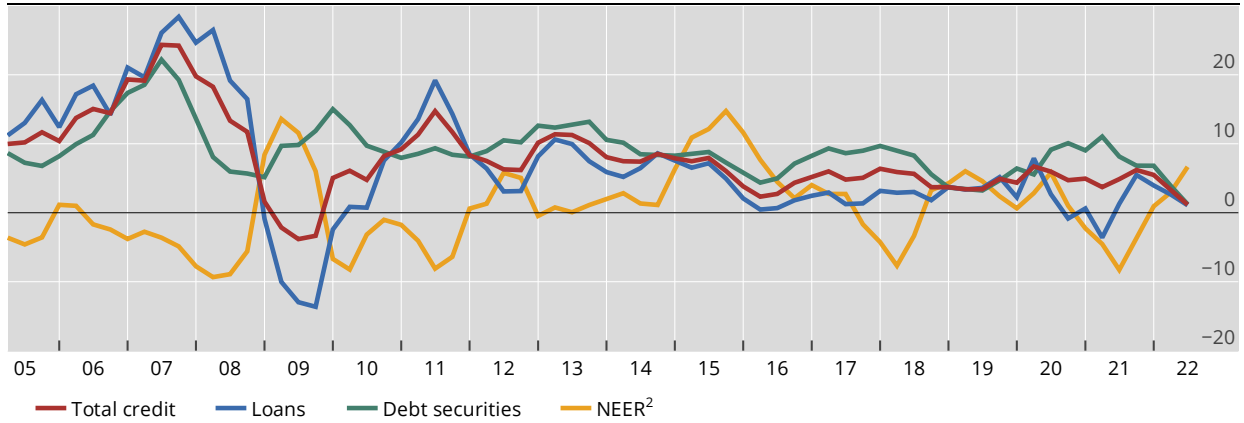
Source: BIS consolidated banking statistics (CBS). Further information is available at [www.bis.org/statistics/consstats.htm](http://www.bis.org/statistics/consstats.htm).

## 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).

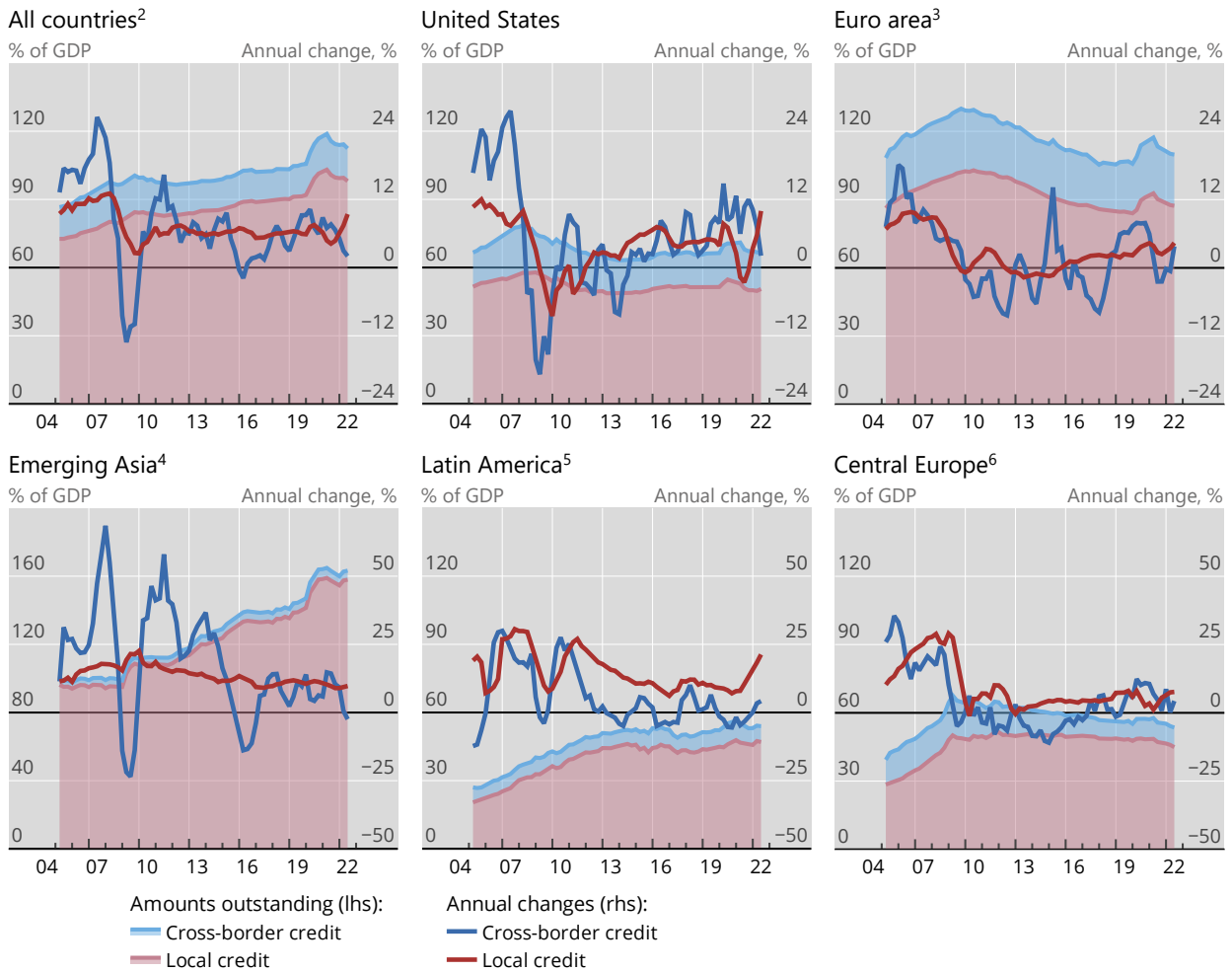
<sup>1</sup> Annual growth of US dollar-denominated credit to non-banks outside the United States. <sup>2</sup> Annual growth of the US dollar nominal effective exchange rate (NEER). An increase indicates an appreciation of the US dollar NEER.

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, 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, 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 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.

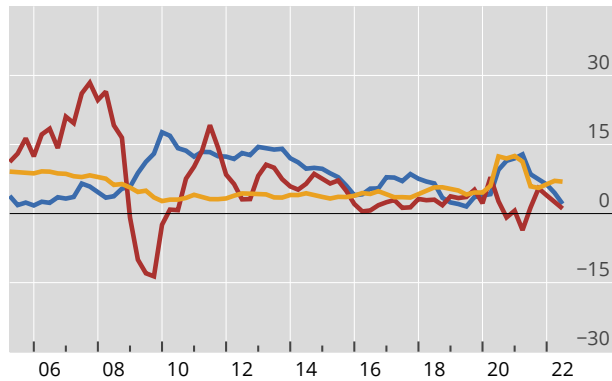
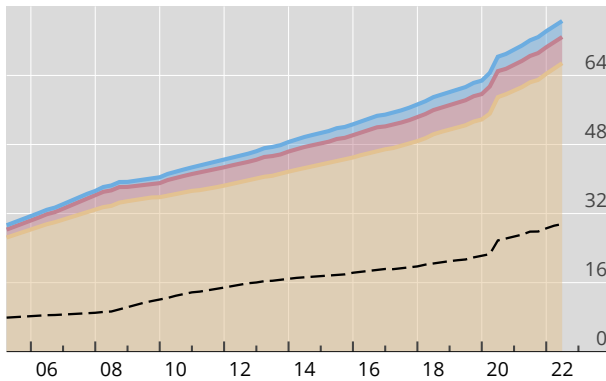
# Global credit to the non-financial sector, by currency

Graph C.3

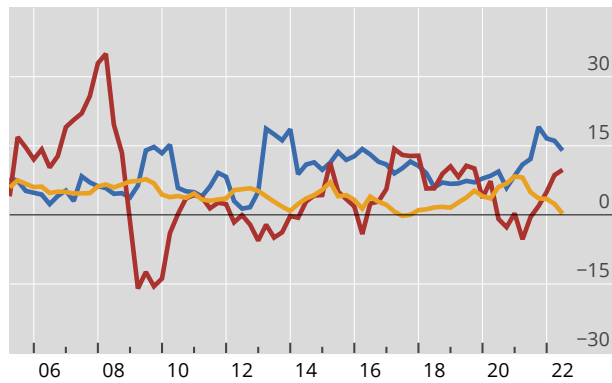
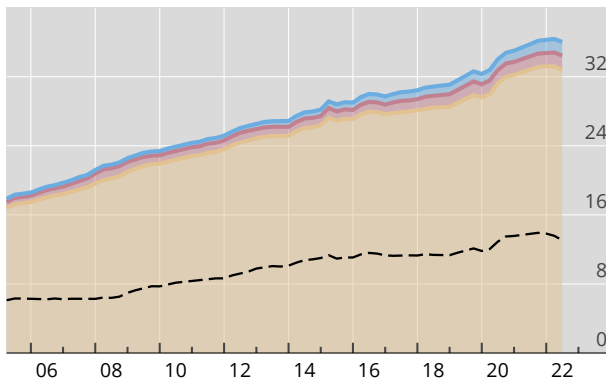
Amounts outstanding, in trillions of currency units<sup>1</sup>

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

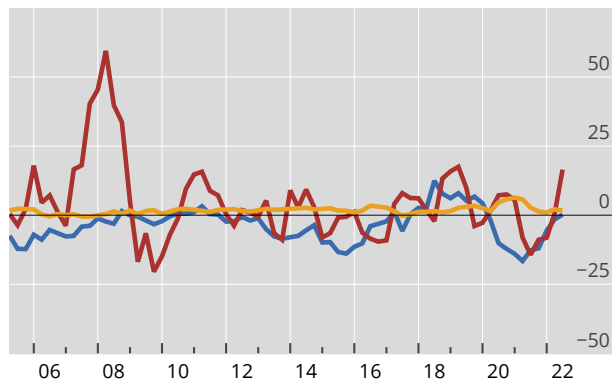
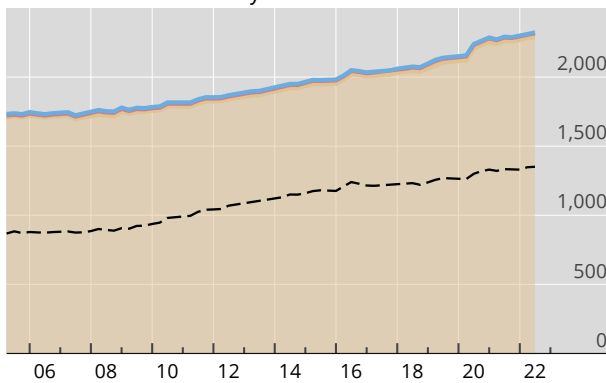
Credit denominated in US dollars



Credit denominated in euros



Credit denominated in yen



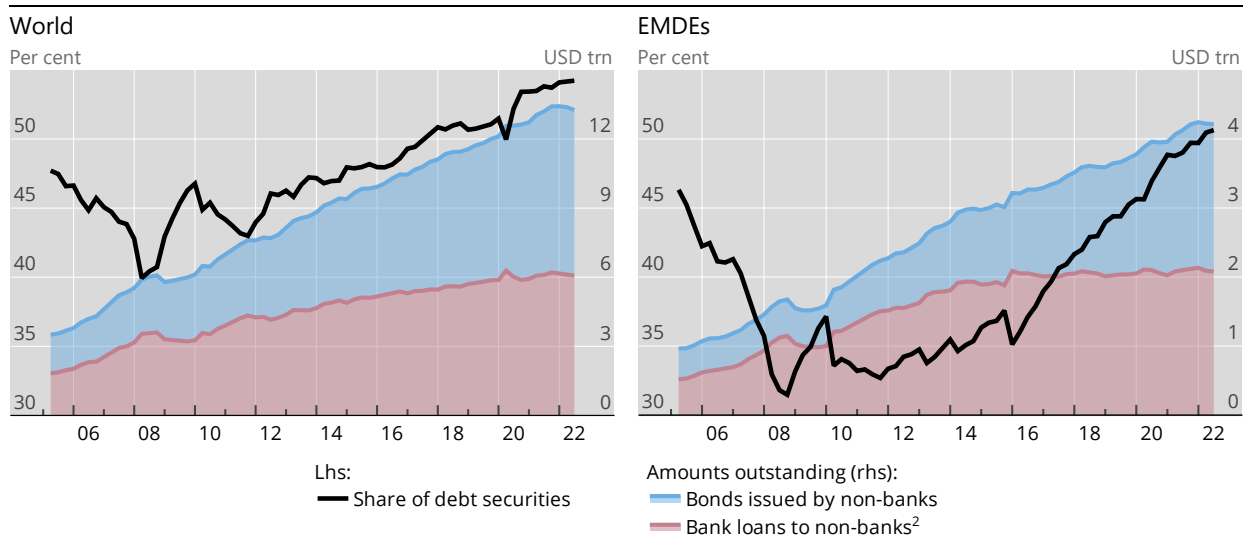
Credit to non-residents: Bank loans<sup>3</sup> (red), Debt securities<sup>4</sup> (blue)  
 Credit to residents:<sup>5</sup> Non-financial sector (tan), Of which: government (dashed black)

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.



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).

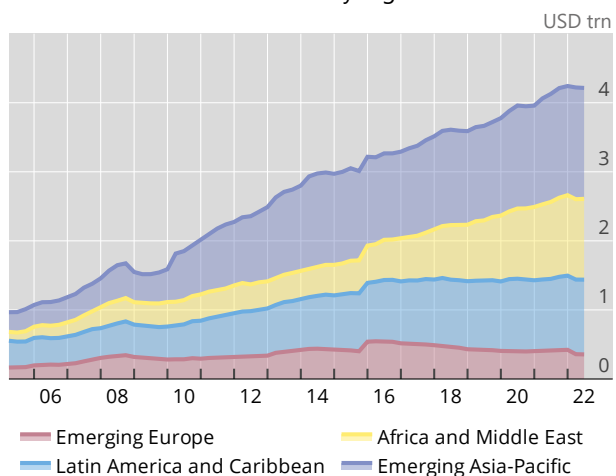
<sup>1</sup> Non-banks comprise non-bank financial entities, non-financial corporations, governments, households and international organisations. <sup>2</sup> Loans by LBS-reporting banks to non-bank borrowers, including non-bank financial entities, comprise cross-border plus local loans.

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

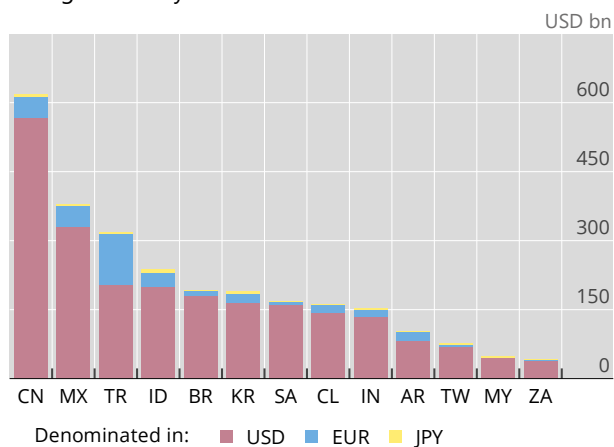
## Foreign currency credit to non-banks in EMDEs

Graph C.5

### US dollar-denominated credit by region



### Foreign currency credit to selected EMDEs<sup>1</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> Amounts outstanding for the latest available data.

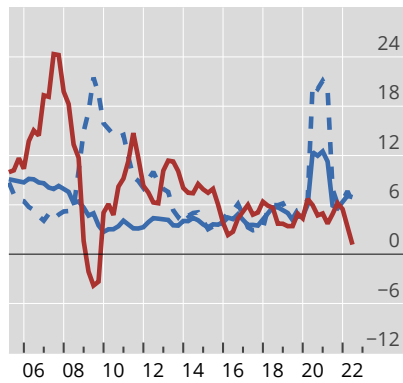
Sources: Datastream; Dealogic; Euroclear; Thomson Reuters; Xtrakter Ltd; national data; BIS locational banking statistics; BIS calculations.

## Credit to non-residents and residents

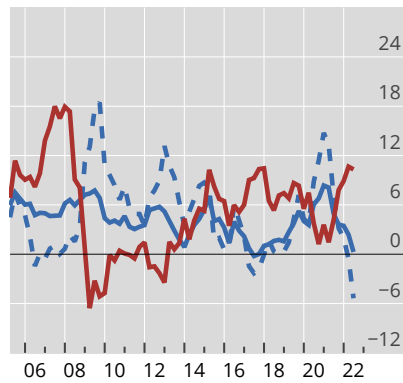
### Year-on-year change, in per cent

Graph C.6

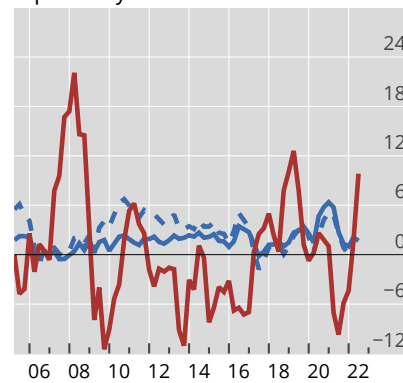
#### US dollar



#### Euro



#### Japanese yen



— Non-residents      — Residents  
- - - Of which: government

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.