



17 March 2014

Global liquidity: selected indicators¹

Highlights

Developments since the previous update on global liquidity in October 2013 point to further divergence in credit growth and financial market conditions among key regions, especially between advanced economies and emerging market economies (EMEs). Although, overall, global liquidity indicators and other measures continue to be in line with an unusually accommodative policy environment, market reactions to the slowing of central bank asset purchases in the United States ("tapering") and the subsequent abrupt capital flow reversals in some EMEs suggest that the forthcoming normalisation process entails the risk of renewed bouts of volatility in financial markets and cross-border flows.

Focusing on **flow measures**, while global growth in international bank credit remains close to zero (Graph I.1), and with cross-border bank credit flat or falling in most regions (Graph I.2), the growth of US dollar-denominated bank credit to non-banks has been more robust. Furthermore, US dollar-denominated international debt has continued to grow at double-digit rates (Graph I.3), and EME corporates have been increasingly relying on debt securities for funding (Graph III.1) – a feature often referred to as the "second phase of global liquidity".

At the same time, **stock measures** point at significant adjustment needs going forward. Outstanding domestic and international bank credit is substantially above its pre-crisis levels (Graph I.2; beige and blue shaded areas), and central bank asset holdings in key advanced economies remain unusually elevated (Graph II.1).

Monetary aggregates and interest rates in advanced economies point to sustained policy accommodation (Graph II.1). In contrast, both policy and longer-term rates in EMEs have increased, significantly in some cases, reflecting in part policy responses to recent capital outflows and exchange rate pressures (Graph III.1). Still, despite some recent tightening in financial conditions, credit spreads in global markets remain compressed (Graph III.3) and **price conditions for risk-taking** largely continue to be in place (Graph IV.1).

Overall, notwithstanding efforts in some parts of the world to begin normalising policy, global liquidity conditions thus remain accommodative. Policymakers need to be aware of the risks posed by the current environment. At some point, more normal conditions will return and should be welcomed. But both policymakers and the private sector will need to be prepared for the adjustment. This means watching out for vulnerabilities that may have built up while conditions were accommodative. It also means taking action to build resilience in the financial system. All types of policies – not just monetary policy – need to play a part in

¹ This note provides an update of the BIS's global liquidity indicators. For the conceptual framework behind the indicators, please see the appendix of the October 2013 update (available at http://www.bis.org/statistics/gli/gli_oct13.pdf).

striving for economic growth that is sustainable. With this longer-term view in mind, policymakers should stay the course despite the inevitable bumps in the road associated with policy normalisation, although they should of course also remain alert to unexpected events and circumstances.

Specific observations

- Growth in US dollar- and euro-denominated bond market credit to non-resident corporates and households remains above that of domestic credit (Graph I.3, right-hand panels), while comparable bank lending in these currencies, particularly in euros, has moderated or declined. Still, the stocks of these exposures remain high (beige and blue portions of the left-hand panels). For example, dollar credit to non-US residents is estimated to be in excess of USD 7 trillion (about 13% of non-US GDP), while euro credit to non-euro area residents stands at above USD 2 trillion. In contrast, the stock of Japanese yen-denominated bank loans to non-residents has been low, but its recent double-digit growth may suggest an expansion in yen exposures going forward.
- Growth in domestic bank credit to non-banks has been positive outside the euro area and emerging Europe, while cross-border bank credit growth has fallen in most regions (Graph I.2, blue and red lines). In Asia-Pacific, however, the cross-border component continues to outpace domestic bank credit, a pattern that has been associated with the build-up of vulnerabilities in the past.
- Despite recent outflows from EME investment funds (Graph III.1, bottom right-hand panel), strong issuance of new international debt by EME banks and corporates points to unusually favourable funding conditions for many of these borrowers (Graph III.1, top and middle right-hand panels). Such developments may entail increased sensitivity of EMEs to capital flow reversals and exchange rate pressures, due to the risk of currency and other balance sheet mismatches.
- Since October 2013, short-term interest rates have increased slightly across EMEs (Graph II.1, top left-hand panel), and significantly so in some cases. In contrast, short-term interest rates remain at or near record lows in advanced economies. While still below historical norms, term premia in advanced economies are up from record lows, reflecting a gradual exit from the period of unusual monetary policy accommodation (Graph II.1, top right-hand panel).
- Loan-to-deposit and non-core liabilities (non-deposit funding over total liabilities) ratios of advanced economy, and especially European, banks have come down to the lowest levels in a decade. Both ratios are lower in EMEs, but have crept upwards in the last few years (Graph III.2).
- Bank CDS premia are back to late 2013 levels after a brief increase in January (Graph III.3, top left-hand panel), which is approximately where they stood before the euro area sovereign debt crisis. Conditions in short-term bank funding markets (Graph III.3, top right-hand panel) and cross-currency funding instruments (Graph III.3, bottom panels) remain broadly unchanged.
- Measures of risk and uncertainty in bond markets, such as the MOVE index, have remained relatively moderate (Graph IV.1, top left-hand panel). Carry trade positioning for some traditional high-yield currencies, such as the Australian and New Zealand dollars, has diverged, possibly indicating greater investor differentiation (Graph IV.1, bottom panels).

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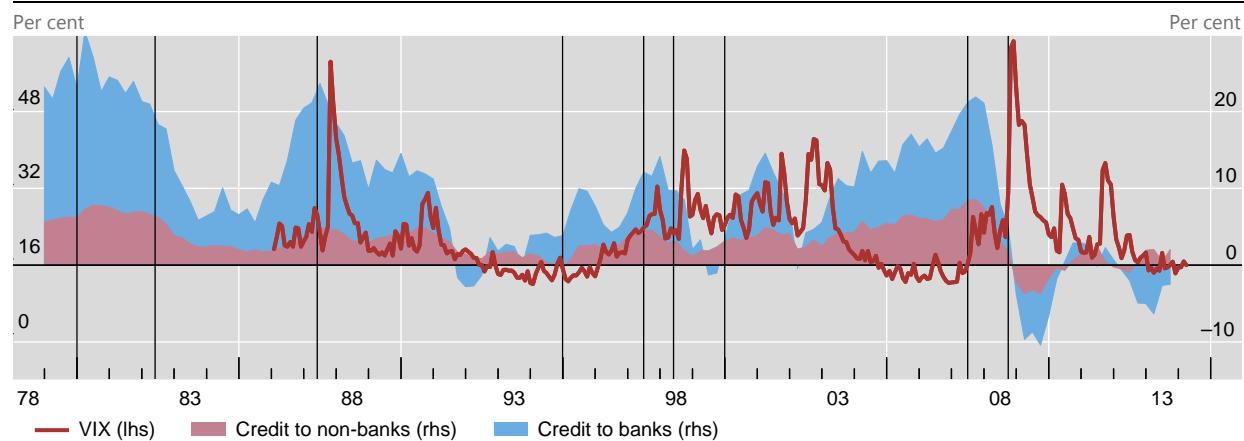
Supplementary indicators

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I. Credit aggregates

Year-on-year rate of growth in international bank claims¹

Graph I.1



The vertical lines indicate: 1979, second oil shock; 1982, Mexican default; 1987, stock market correction; 1994, Mexican peso devaluation; 1997, Asian financial crisis; 1998, Russian default and LTCM; 2000, Nasdaq peak; 2007, beginning of global financial crisis; 2008, collapse of Lehman Brothers.

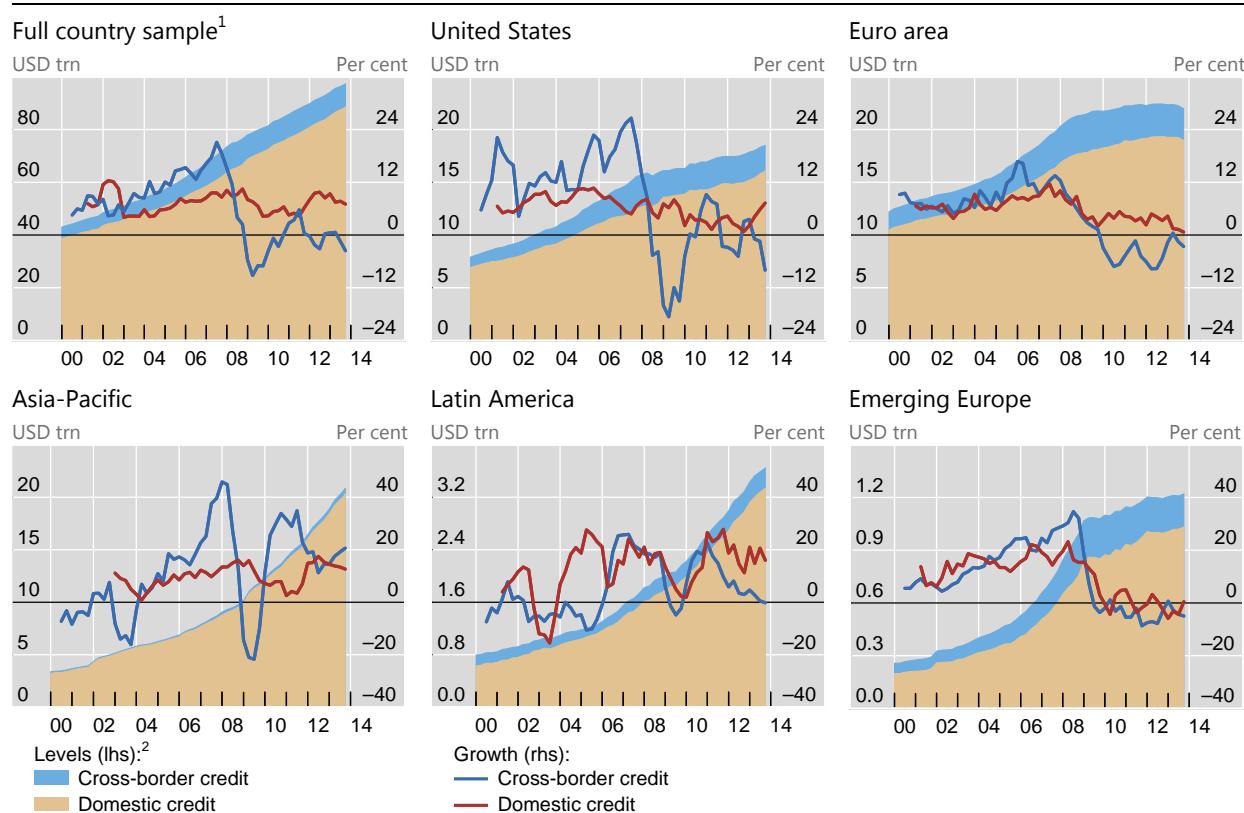
¹ Includes all BIS reporting banks' cross-border credit and local credit in foreign currency.

Sources: Bloomberg; BIS locational banking statistics by residence.

Global bank credit aggregates, by borrower region

At constant end-Q3 2013 exchange rates

Graph I.2



¹ Aggregate for a sample of 56 reporting countries. ² Total bank credit to non-bank borrowers (including governments), adjusted using various components of the BIS banking statistics to produce a breakdown by currency for both cross-border credit and domestic credit.

Sources: IMF, *International Financial Statistics*; BIS international banking statistics; BIS calculations.

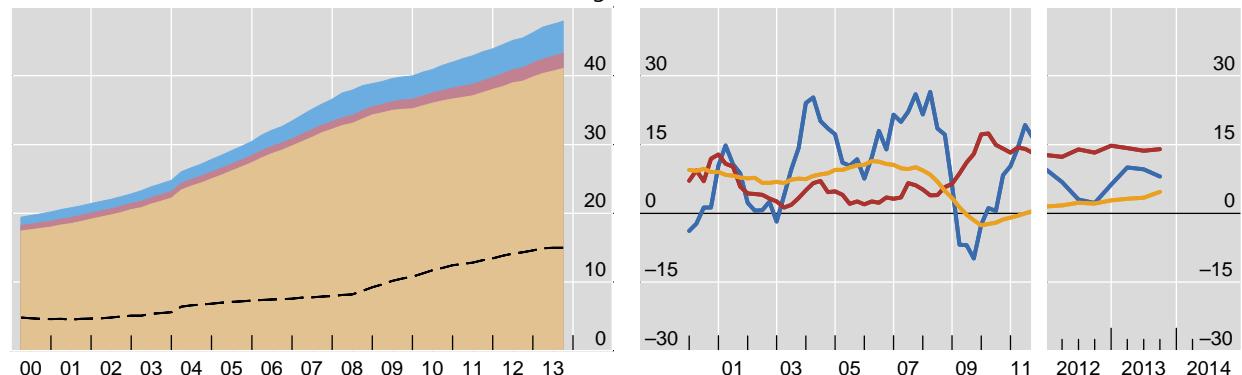
Global credit in US dollars, euros and Japanese yen

Graph I.3

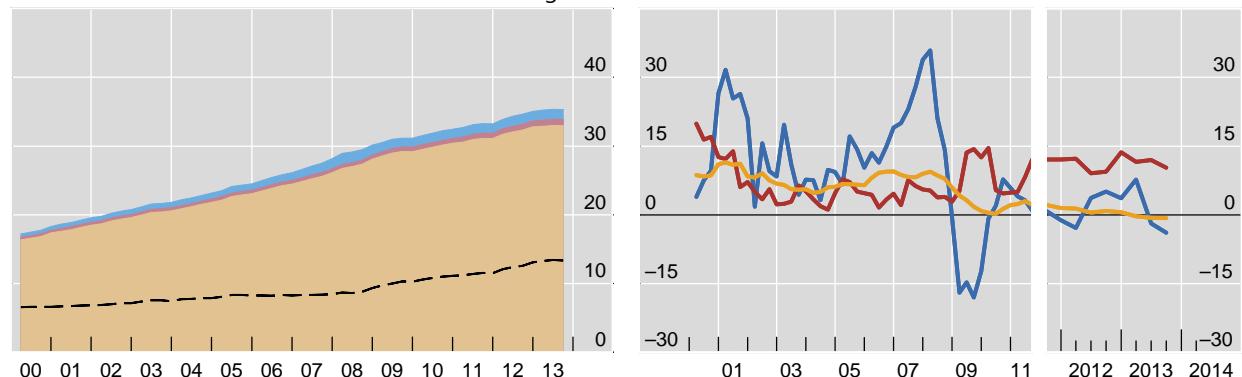
Stocks, in trillions of US dollars

Year-on-year growth, in per cent

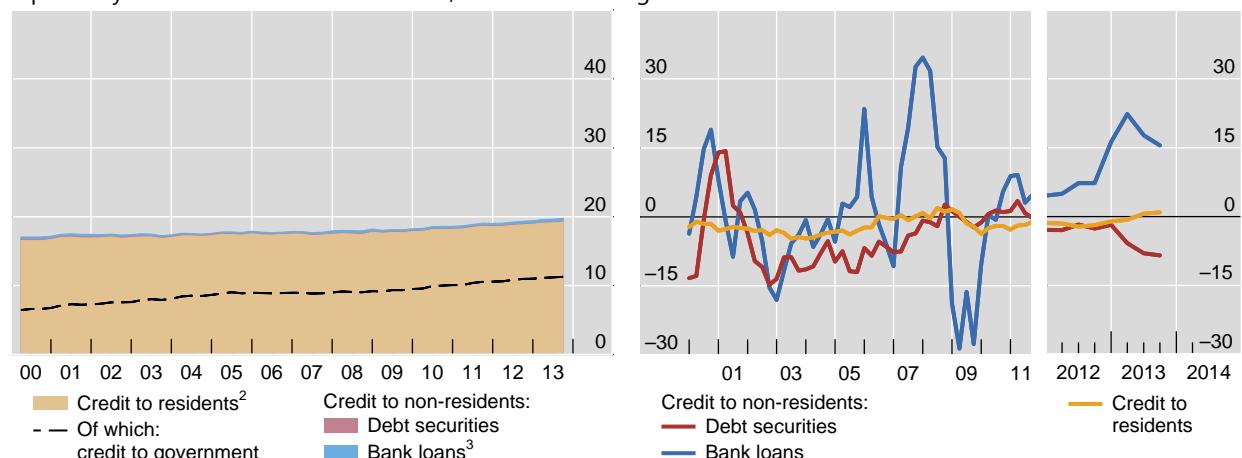
US dollar credit to non-financial firms, households and governments



Euro credit to non-financial firms, households and governments¹



Japanese yen credit to non-financial firms, households and governments¹



¹ At constant end-Q3 2013 exchange rates. ² Credit to non-financial sector in the United States/euro area/Japan from national flow of funds, excluding credit to these borrowers in non-domestic currencies (ie cross-border and locally extended loans and outstanding international bonds in non-domestic currencies). ³ Cross-border and locally extended loans to non-banks outside the United States/euro area/Japan, respectively. For China, locally extended loans are derived from national data on total local lending in foreign currencies on the assumption that 80% are denominated in US dollars. For other non-BIS reporting countries, local US dollar/euro/Japanese yen loans to non-banks are proxied by all BIS reporting banks' gross cross-border US dollar/euro/Japanese yen loans to banks in the country, on the assumption that these funds are then extended to non-banks. Data on bank loans to non-residents and the associated graphs have been revised since the initial publication on 17 March.

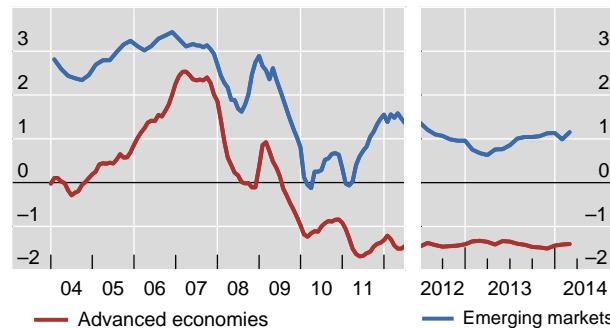
Sources: IMF, *International Financial Statistics*; Datastream; BIS international debt statistics and locational banking statistics by residence.

II. Monetary liquidity

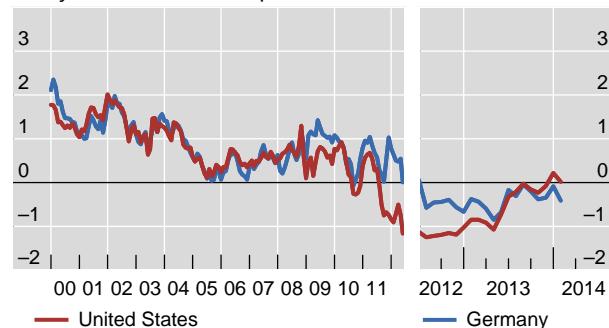
Indicators of monetary liquidity

Graph II.1

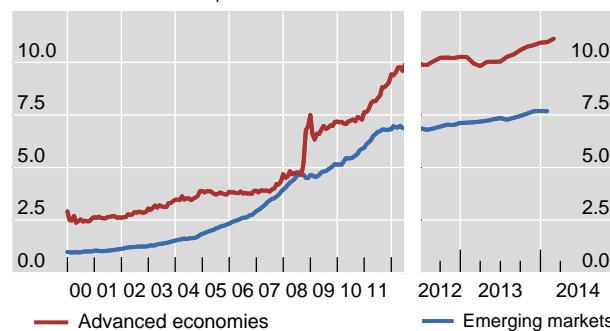
Global real short-term interest rates¹



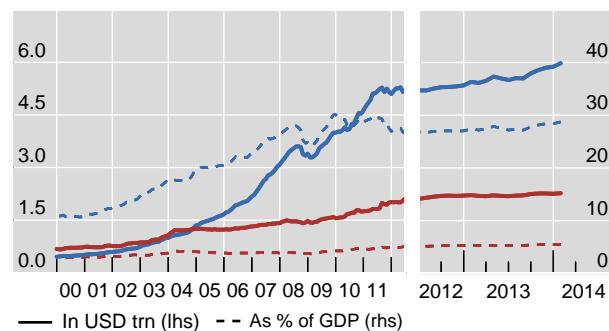
Ten-year nominal term premium²



Central bank assets, in USD trillions



Official FX reserves



¹ Based on 12-months-ahead average inflation expectations. ² Ten-year nominal term premium (sum of the real risk premium and the inflation risk premium) as derived from econometric term structure models.

Sources: IMF, *International Financial Statistics*; OECD, *Main Economic Indicators*; Bloomberg; Consensus Economics; Datastream; BIS calculations.

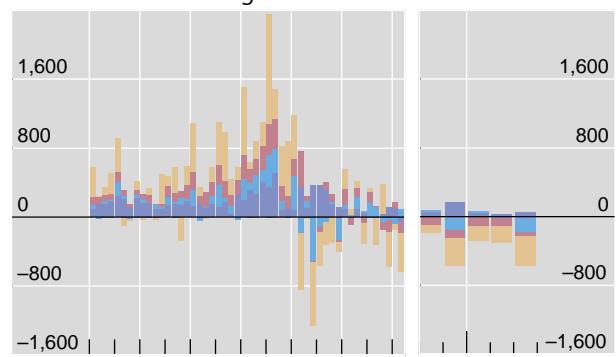
III. Funding liquidity

External financing flows

In billions of US dollars

Graph III.1

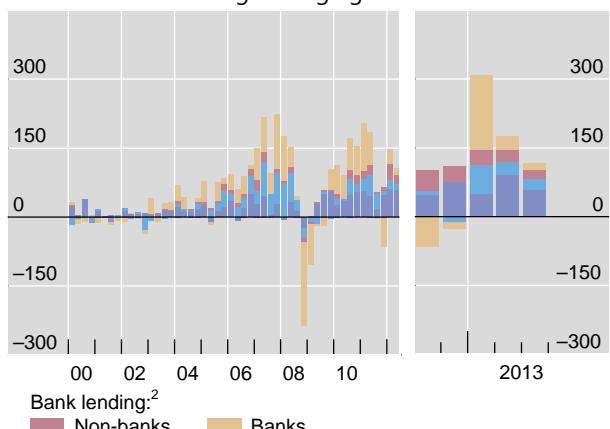
Debt and bank lending: advanced economies



Net international debt securities issuance:¹

Non-banks Banks

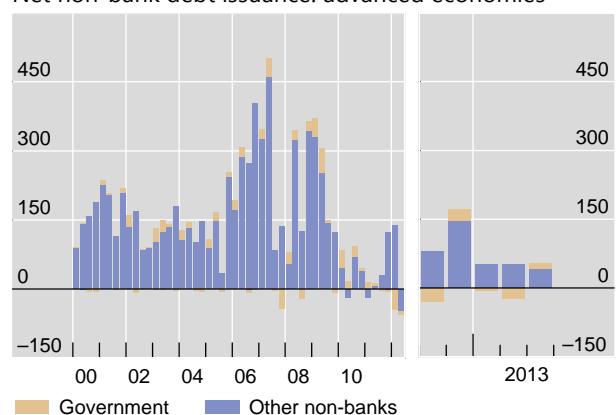
Debt and bank lending: emerging markets



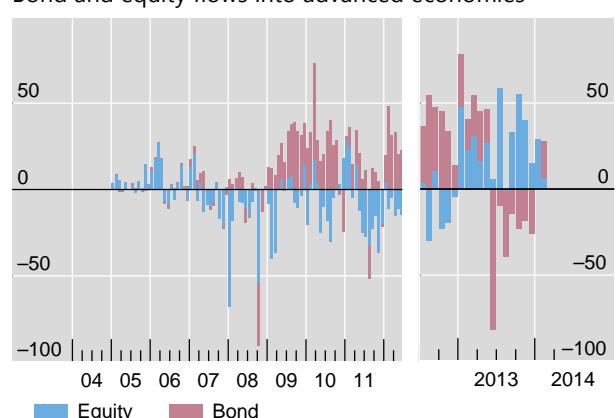
Bank lending:²

Non-banks Banks

Net non-bank debt issuance: advanced economies¹

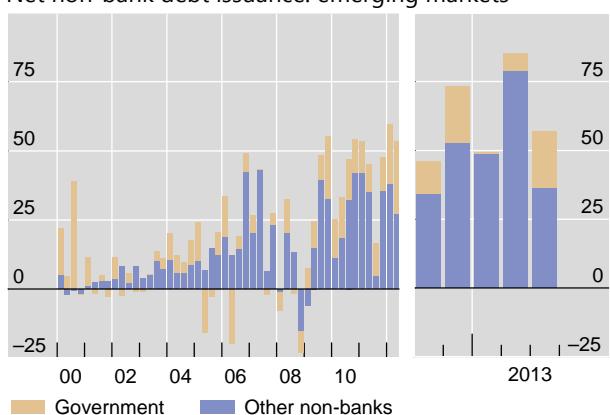


Bond and equity flows into advanced economies³



Equity Bond

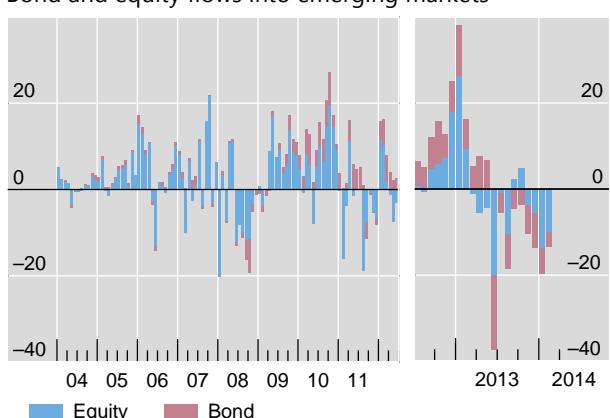
Net non-bank debt issuance: emerging markets¹



Government

Other non-banks

Bond and equity flows into emerging markets³



Equity Bond

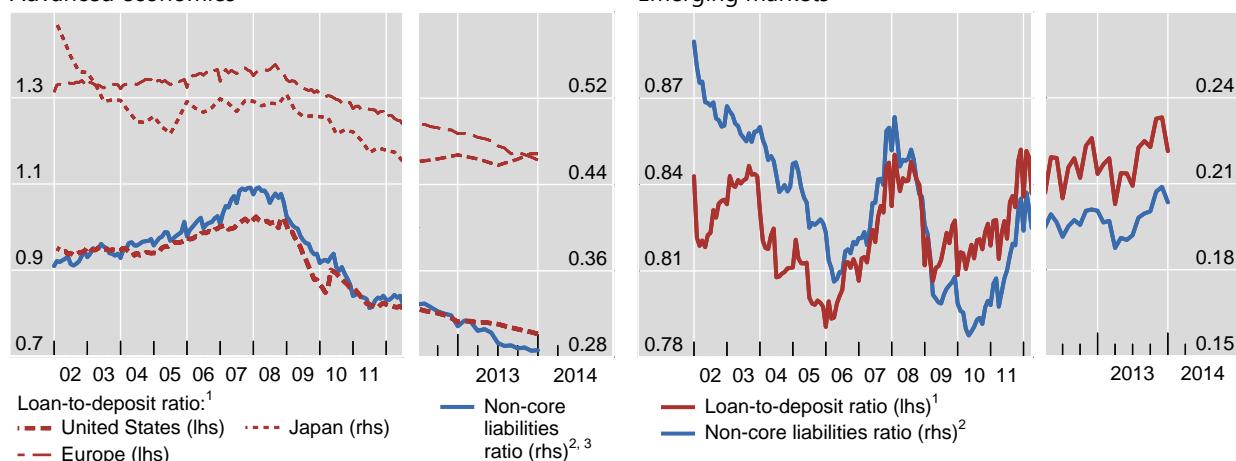
¹ Net international debt issuance for all issuers, in all maturities, by nationality of issuer. In December 2012, the BIS revised the compilation of its debt securities statistics to enhance their comparability across different markets. International issues were redefined as debt securities issued outside the market where the borrower resides. ² External loans of BIS reporting banks vis-à-vis individual countries; estimated exchange rate-adjusted changes. ³ Monthly flows into equity and bond funds; for the most recent observation, sum of available weekly figures.

Sources: Dealogic; EPFR; Euroclear; Thomson Reuters; Xtrakter Ltd; BIS locational banking statistics by residence; BIS calculations.

Banking sector loan-to-deposit and non-core liabilities ratios

Graph III.2

Advanced economies



¹ Weighted average by deposits. ² Bank liabilities (excluding equity) minus customer deposits divided by total liabilities. ³ The United States, Japan and Europe (the euro area, the United Kingdom and Switzerland). This ratio measures the degree to which banks finance their assets using non-deposit funding sources.

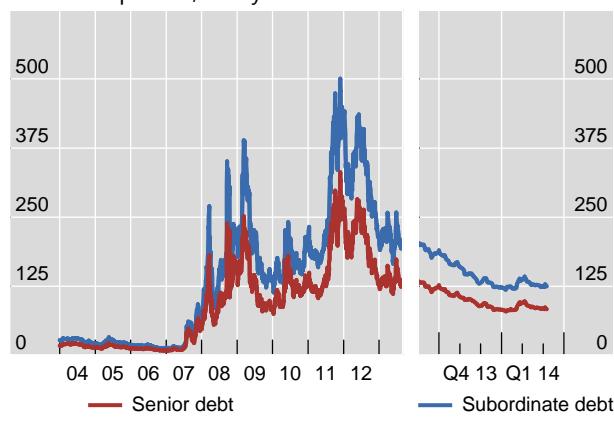
Sources: IMF, *International Financial Statistics*; national data; BIS calculations.

Short-term and cross-currency funding conditions

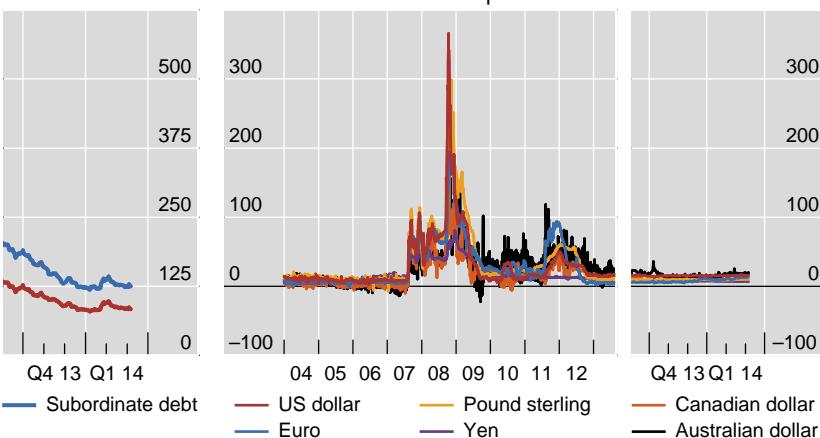
In basis points

Graph III.3

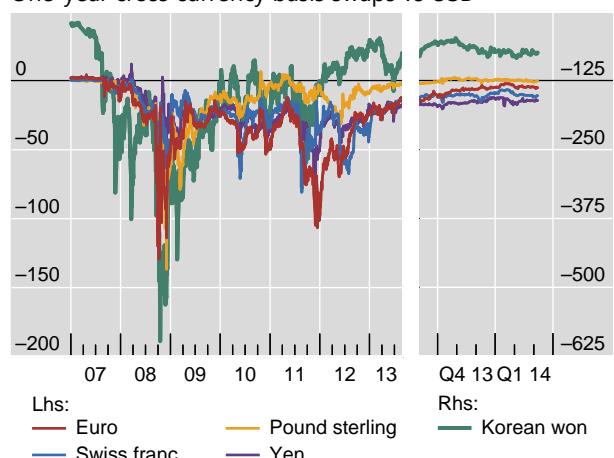
Bank CDS premia, five-year



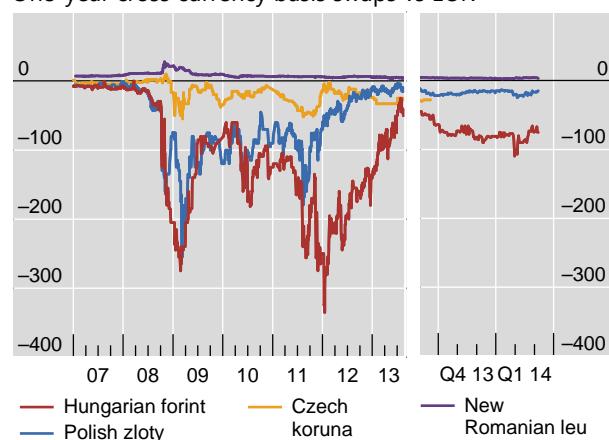
Three-month Libor-OIS spread



One-year cross currency basis swaps vs USD



One-year cross currency basis swaps vs EUR

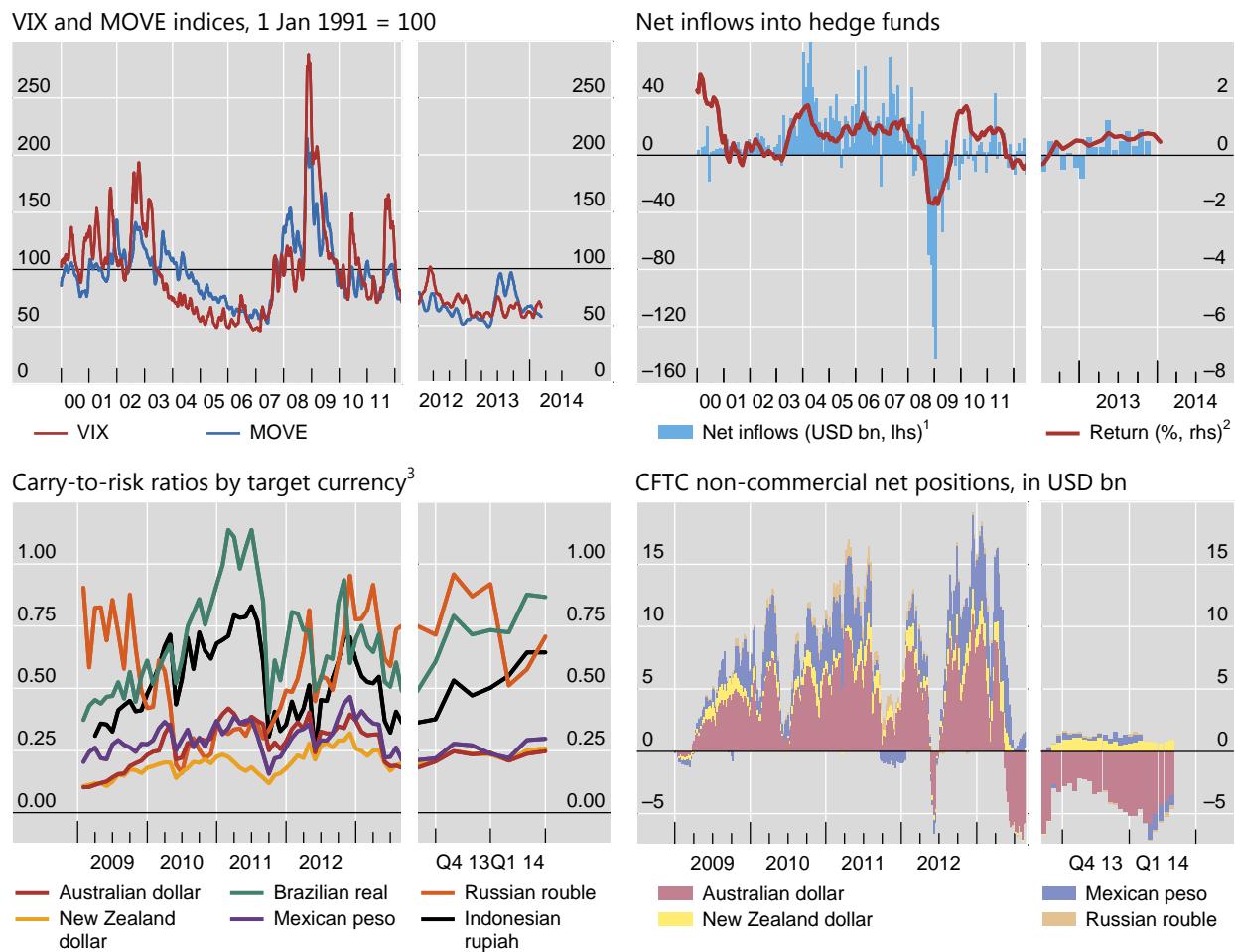


Sources: Bloomberg; Markit; BIS calculations.

IV. Risk appetite

Risk appetite and market positioning

Graph IV.1



¹ Information based on active funds reporting to HFR database. Most recent data are subject to incomplete reporting. ² HFRI Monthly Performance Indices calculated by Hedge Fund Research; 12-month moving average. ³ Carry-to-risk ratios reflect the attractiveness of carry trades by measuring the ex ante, risk-adjusted profitability of a carry trade position such that the one-month interest rate differential is divided by the implied volatility of one-month at-the-money exchange rate options. Aggregates for possible target currencies are obtained by averaging the relevant currency pairs.

Sources: Bloomberg; HFR; BIS calculations.