8 October 2014

Global liquidity: selected indicators[1]

Highlights

Indicators of global liquidity point to a continued strengthening of risk appetite and loosening of credit conditions in the spring and summer of 2014. International credit flow patterns in many regions have favoured growth in debt issuance over bank-intermediated cross-border funding. Since mid-September, some market jitters have reappeared, reflecting heightened geopolitical risks as well as market participants' perception that the timing of the Federal Reserve's exit from accommodative policy might be brought forward even as central banks in other advanced economies, particularly the euro area and Japan, have maintained or intensified easing measures. This shift in perceptions has resulted in an appreciation of the US dollar against a broad range of currencies, including an especially sharp depreciation in the case of some emerging market economies (EMEs), as well as falling equity markets and some widening of credit spreads. The strong dollar has put downward pressure on commodity prices, adding to the challenges facing commodity exporters.

The financing patterns of the past few years could expose markets to further vulnerabilities going forward as quantities and prices continue to adjust to shifts in monetary conditions and the macroeconomic outlook. While monetary policy remains highly accommodative in the major economies, diverging forward paths for monetary policies among the advanced economies and the implied changes in relative funding costs could set the stage for further significant market adjustments. The impact of these shifts on financing flows remains to be seen.

Whereas the previous edition of these indicators in March pointed to signs of a divergence between ongoing loose conditions in advanced economies and a more cautious stance in emerging market economies, in the months that followed conditions again loosened for the emerging economies. Among other things, this reflected: the strong policy reaction on the part of a number of EME authorities, which helped to stabilise these economies and restore market confidence; the easing of concerns that a rapid withdrawal of accommodation by the Federal Reserve would disrupt global financing patterns; ongoing search for yield in an environment of very low nominal rates; and the adoption of greater monetary accommodation, including quantitative easing measures, by the ECB.

Cross-border bank credit growth, which often accompanies upswings in global risk-taking, turned positive *in the first quarter of 2014*, with a quarter-on-quarter rise of $580 billion, after having fallen for several quarters. As a result, international bank credit (the sum of cross-border and local foreign-currency claims) through the first quarter of 2014 was flat on a year-on-year basis, after

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

several quarters in which this indicator had exhibited a year-on-year decline (Graph I.1). In contrast to bank lending, debt securities continued to gain importance as a channel for global credit flows through *the first half of 2014* (Graph I.3). Bond markets have been especially prominent in flows to EMEs (Graph III.1). Strong issuance of emerging market debt instruments has been spurred by inflows into emerging market-oriented mutual funds (Graph III.1, bottom right-hand panel), which rebounded strongly in the first half of 2014 after a wave of outflows in late 2013. As discussed in the September 2014 *BIS Quarterly Review* (pp 17–18), much of this issuance took place through offshore vehicles; as a result, it is not fully picked up by statistics that classify issuance on a residence basis. The increased maturity of these issues reduces rollover risk, but may expose investors to greater losses if prevailing market yields rise or volatility in foreign exchange markets increases.

Long-term debt issuance has been supported by the decline in the term premium (Graph II.1). This premium (as modelled by the BIS) returned to negative territory in 2014 for both US and German government bonds, after approaching zero in the second half of 2013 ahead of the tapering of asset purchases by the Federal Reserve. The relatively low level of the premium on German bunds reflects the market's shift of focus away from the Fed's purchases and towards European disinflation as well as further easing by the ECB.

Specific observations

- Cross-border bank credit has grown especially strongly in the Asia-Pacific region (Graph I.2, bottom left-hand panel), though the stock of such credit in the region remains small relative to very large domestic credit stocks. Cross-border lending to borrowers resident in the US also rose in the first quarter, while remaining negative on a year-on-year basis, as domestic US bank credit accelerated (Graph I.2, top centre panel). Robust domestic bank credit growth has also offset consecutive declines in cross-border bank lending to Latin American economies. In contrast, both types of bank lending have been contracting in the euro area and emerging Europe, with a particularly pronounced decline in cross-border bank credit in the euro area.
- Despite having risen in the last few weeks, both implied and realised volatility generally remain low across a range of asset markets (Graphs I.1 and IV.1). That said, there have been signs of repositioning, especially in FX markets. Moreover, as discussed in the September 2014 *BIS Quarterly Review* (pp 10–11), a measure of risk aversion derived from comparing implied to realised equity volatility is still at historically low levels.
- The sharper declines in term premia on euro area debt compared to the US have been associated with a drop in the growth of US dollar-denominated offshore bond issuance, while euro bond issuance has been catching up (Graph I.3). This trend has been reinforced by the narrowing spread on cross-currency basis swaps (Graph III.3, bottom left-hand panel), which has reduced the incentive for borrowers to issue in dollars and swap the proceeds into euros.
- In the first half of 2014, loan-to-deposit and non-core liabilities ratios of European banks came down to levels not seen in a decade, while remaining above their US and Japanese counterparts. Both ratios continued to trend up in EMEs, though they remained below advanced economy levels (Graph III.2).

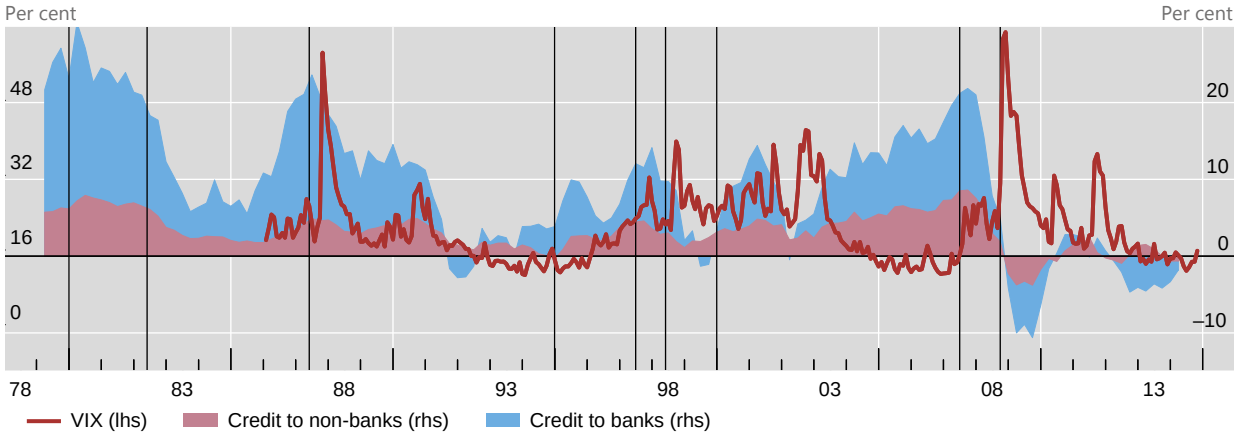
- Through August, long positions in "high-yielding" currencies, such as the Australian and New Zealand dollars and Mexican peso, were funded by short positions in the euro, Swiss franc and Japanese yen (Graph IV.1). Some of these positions were reversed in September. Whether and how any carry trade positions will be unwound over the coming weeks will largely depend on the magnitudes of currency market volatilities and the ease of switching out of US dollar funding to funding in other currencies by banks and other financial intermediaries. Furthermore, to the extent that currency risk has been increasingly borne by non-financial borrowers, who tend to borrow directly in US dollars and other major low-yielding currencies, this may modify the dynamics of the adjustments going forward, for example if these borrowers exit these positions more rapidly than others.

Contents

I. Credit aggregates

Year-on-year rate of growth in international bank claims[1]

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.

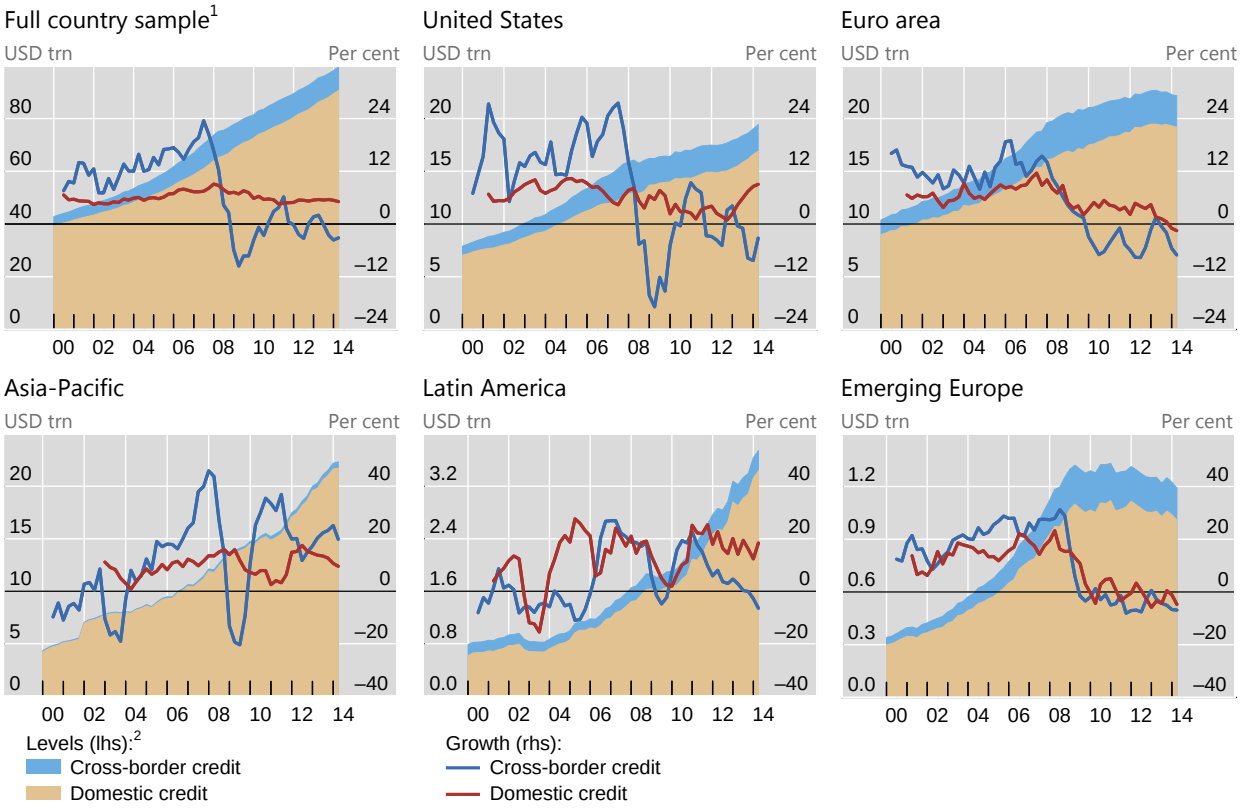
[1] Includes all BIS reporting banks' cross-border credit and local credit in foreign currency.

Sources: Bloomberg; BIS locational banking statistics by residence.

Global bank credit aggregates, by borrower region

At constant end-Q1 2014 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.

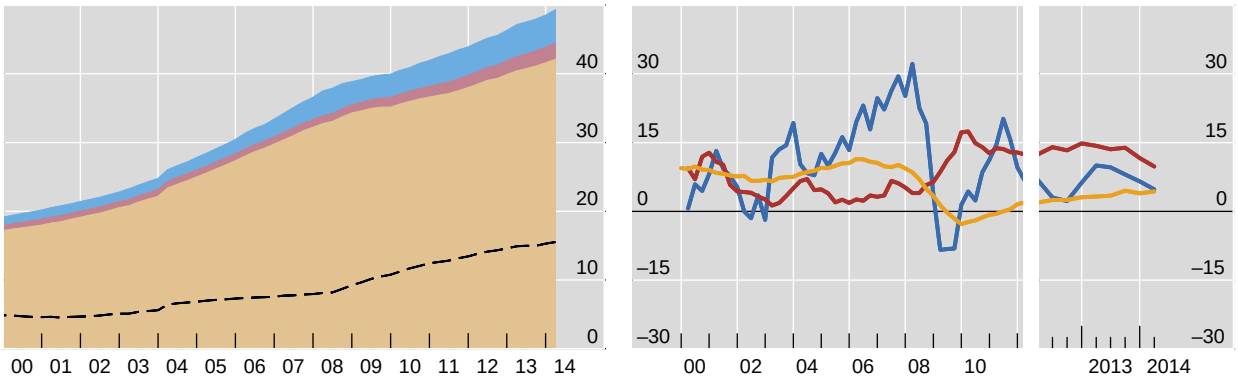
Sources: IMF, *International Financial Statistics*; BIS international banking statistics; BIS calculations.

Global credit in US dollars, euros and Japanese yen

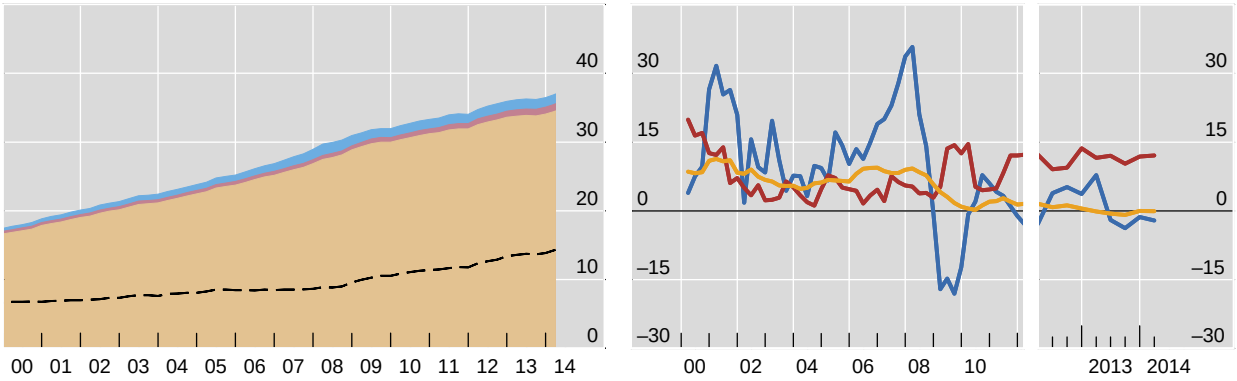
Graph I.3

Stocks, in trillions of US dollars | Year-on-year growth, in per cent

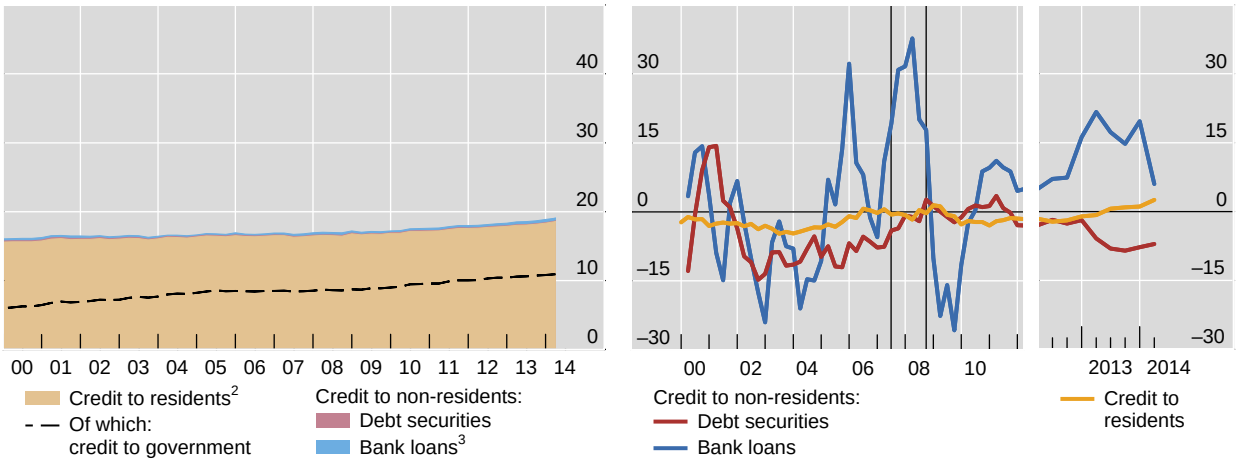
US dollar credit to non-financial firms, households and governments



Euro credit to non-financial firms, households and governments[1]



Japanese yen credit to non-financial firms, households and governments[1]

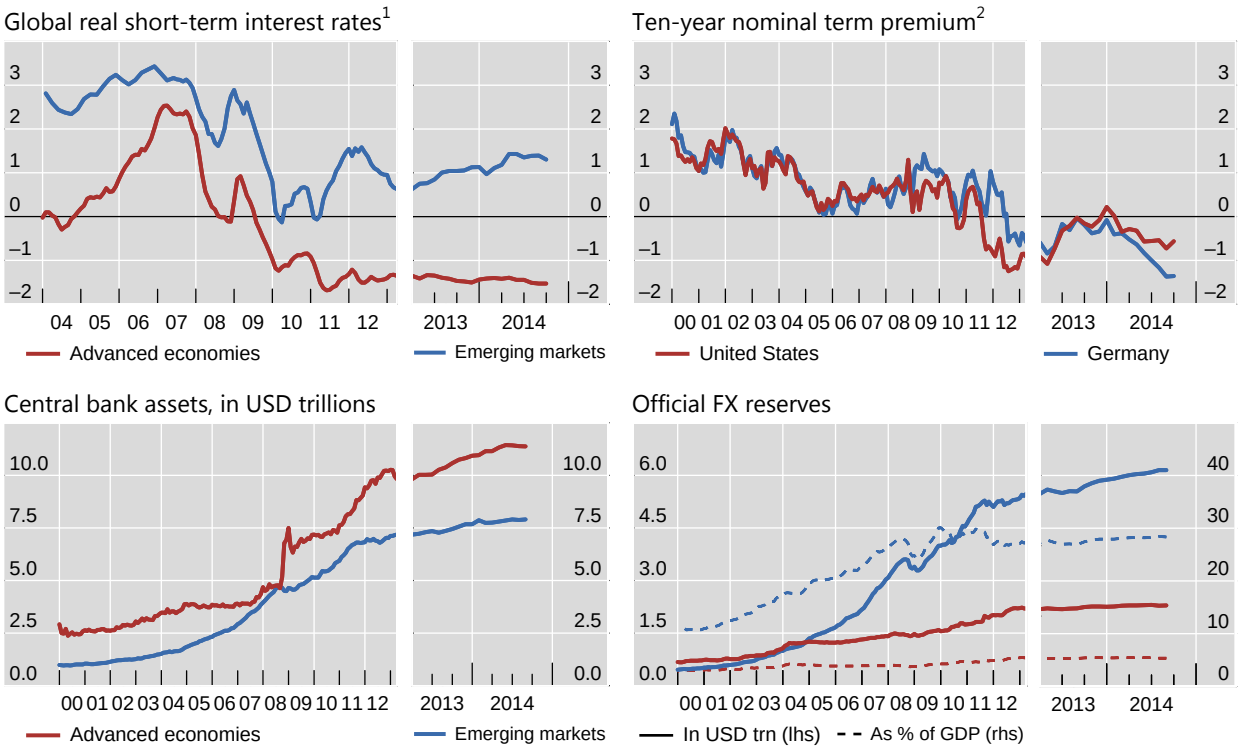


[1] At constant end-Q1 2014 exchange rates. [2] Credit to non-financial sector in the United States/euro area/Japan from national flow of funds, excluding identified credit to these borrowers in non-domestic currencies (ie cross-border and locally extended loans and outstanding international bonds in non-domestic currencies). [3] Cross-border and locally extended loans to non-banks outside the United States/euro area/Japan. For China and Hong Kong SAR, 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.

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

Indicators of monetary liquidity

Graph II.1

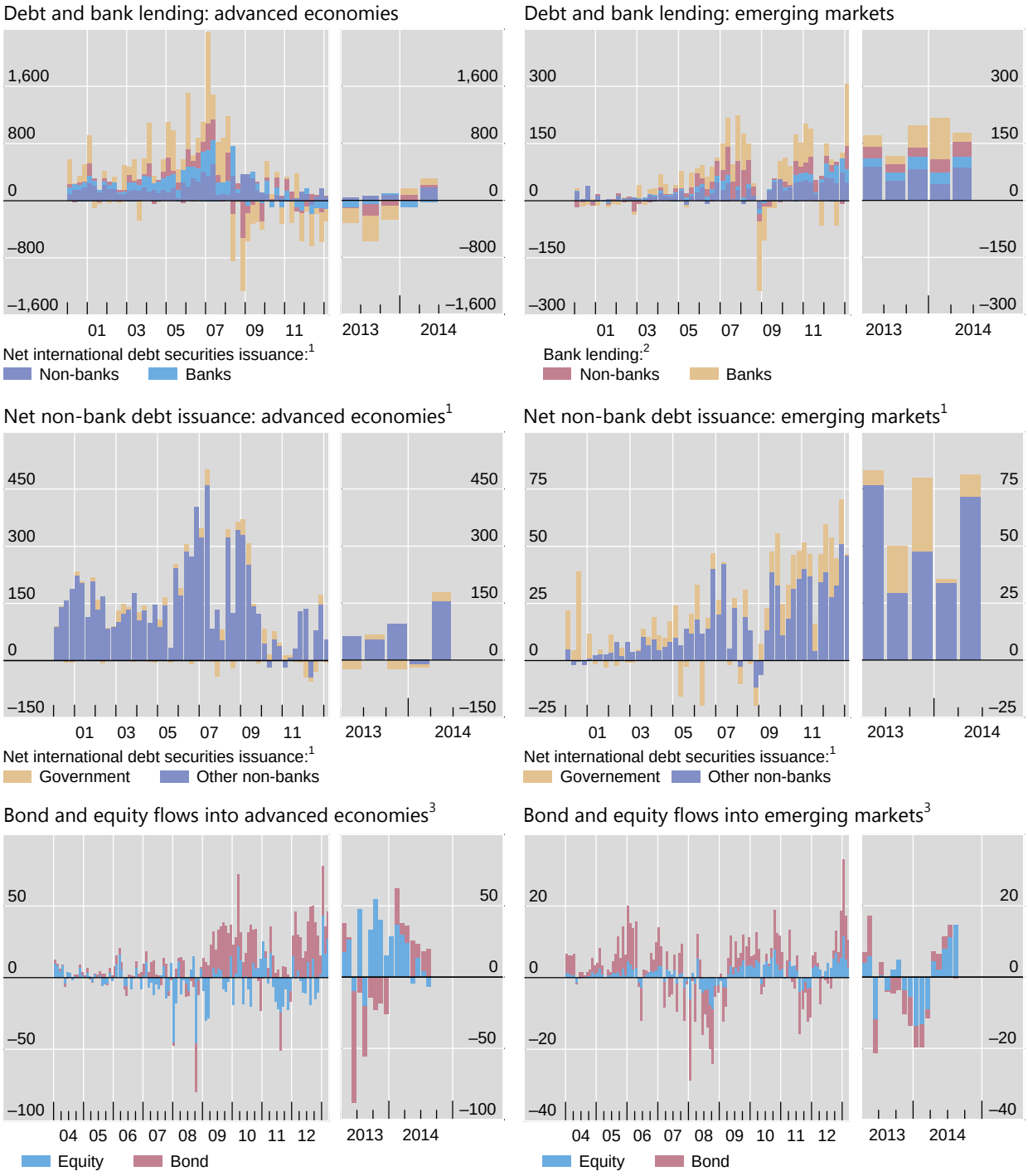


[1] Based on 12-months-ahead average inflation expectations. [2] Ten-year nominal term premium (sum of the real risk premium and the inflation risk premium) as derived from econometric term structure models.

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

External financing flows

In billions of US dollars — Graph III.1

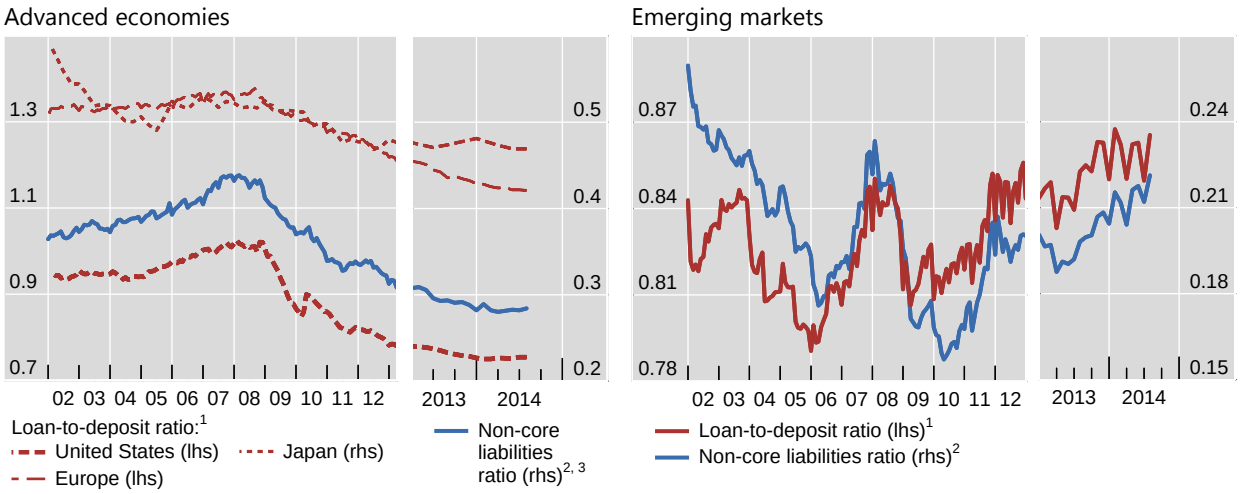


[1] Net international debt issuance for all issuers, in all maturities, by nationality of issuer. In December 2012, the BIS revised the compilation of its debt securities statistics to enhance their comparability across different markets. International issues were redefined as debt securities issued 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



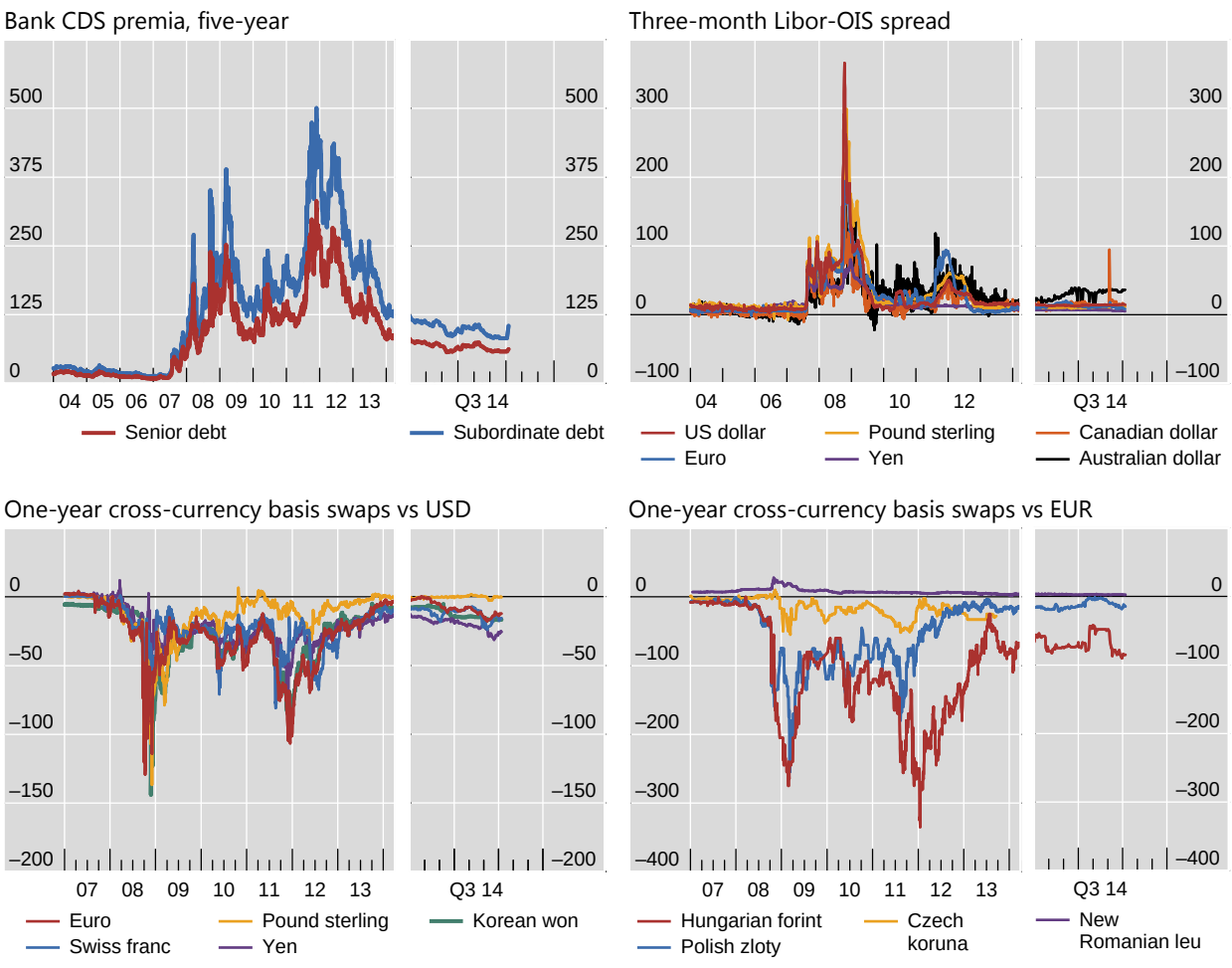
[1] Weighted average by deposits. [2] Bank liabilities (excluding equity) minus customer deposits divided by total liabilities. [3] The United States, Japan and Europe (the euro area, the United Kingdom and Switzerland). This ratio measures the degree to which banks finance their assets using non-deposit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

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

Short-term and cross-currency funding conditions

In basis points

Graph III.3

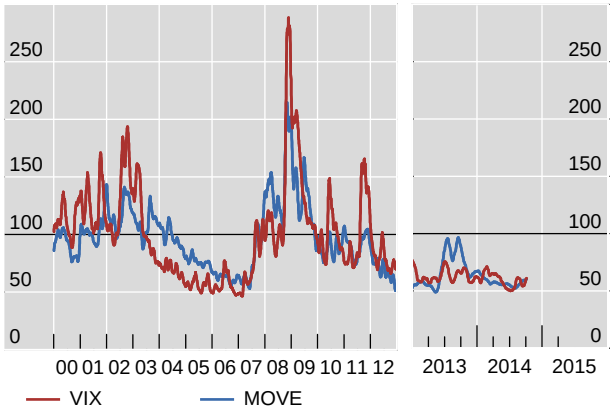


Sources: Bloomberg; Markit; BIS calculations.

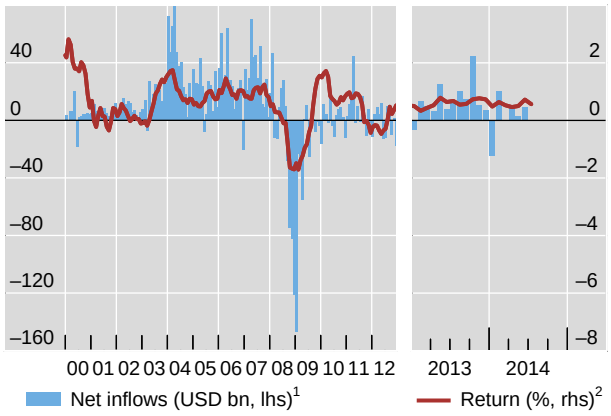
Risk appetite and market positioning

Graph IV.1

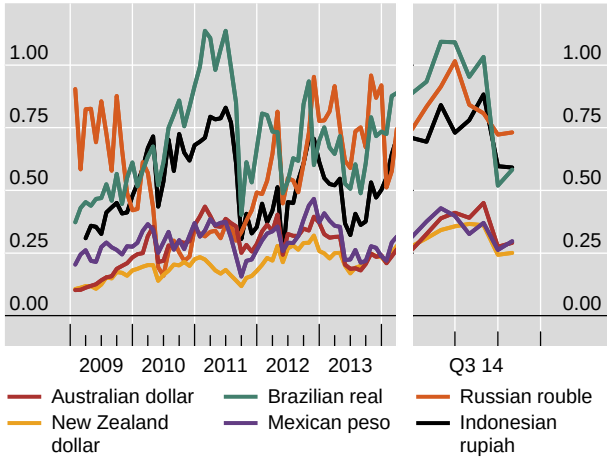
VIX and MOVE indices, 1 Jan 1991 = 100



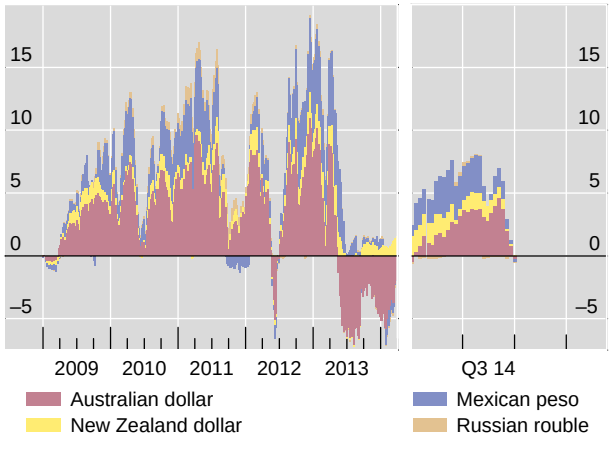
Net inflows into hedge funds



Carry-to-risk ratios by target currency[3]



CFTC non-commercial net positions, in USD bn



[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.