Optimism evaporates[1]

Hopes for the global economic recovery and concerns about the euro area were the two main competing themes in the marketplace in the period from March to May. These two themes interacted throughout and were broadly reflected across financial markets.

Early in the period, following the ECB's longer-term refinancing operations, investor sentiment improved substantially. With bank funding strains reduced, the focus shifted to the strength of the global economy. Positive US economic news and the continued resilience of emerging market growth helped raise hopes of a steady economic recovery. The renewed optimism was particularly visible in equity and commodity markets. Fixed income markets saw a compression in credit spreads, especially for banks and selected euro area sovereigns. It also resulted in a spurt of capital inflows to emerging markets.

But by the middle of May, doubts had returned: doubts about euro area growth; doubts about the financial health of euro area sovereigns; doubts about banks; doubts about the impact of fiscal consolidation on growth; and finally, doubts about political stability inside the euro area. All of this, combined with early signs of more fragile US and Chinese growth, made investors more cautious and drove up global financial market volatility.

Short-lived optimism about the recovery

The ECB's special longer-term refinancing operations (LTROs) successfully reduced the perceived risk of a severe banking crisis in Europe. By early March, the scale of the combined liquidity injection in the two operations had produced a noticeable impact across financial markets. Concerns about severe downside risks of market participants faded and investors' risk appetite generally picked up.

The temporary improvement in risk sentiment was also clearly reflected in the implied volatility of equity options. After having been elevated during the

[1] Questions related to this article should be addressed to Jacob Gyntelberg (jacob.gyntelberg@bis.org) and Andreas Schrimpf (andreas.schrimpf@bis.org). Questions about data and graphs should be addressed to Magdalena Erdem (magdalena.erdem@bis.org) and Garry Tang (garry.tang@bis.org).

latter part of 2011, the VIX reached its lowest level since June 2007 (Graph 1, left-hand panel) on 19 March.

Policy actions spur optimism …

Funding conditions for euro area banks improved significantly as they benefited from the second instalment of the ECB's longer-term operations on 29 February. With a take-up of €530 billion for three years at the average policy rate over the duration of the loans (currently 1%), the LTRO funds helped financial institutions with funding difficulties cover maturing debt. As risk perceptions eased, European and US bank credit spreads fell, at least temporarily. The decline in spreads was most pronounced for lower-rated banks (Graph 1, centre panel). The successful easing of funding stress was highly visible in money markets, where Libor-OIS spreads tightened by around 60 basis points in the euro market and by around 20 basis points in the US dollar market (Graph 1, right-hand panel).

… and ease bank funding conditions

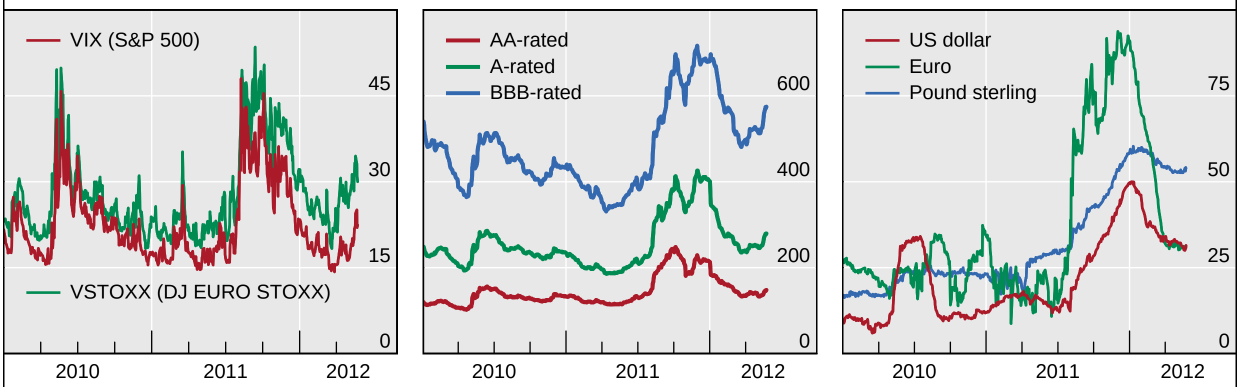
The improvement was also visible in the primary market for long-term unsecured bank bonds, which reopened temporarily at the beginning of the year. This funding channel had been closed for a large number of euro area banks in the second half of 2011. Many banks from the euro area periphery, however, continued to rely heavily on covered bonds and government-guaranteed bonds for funding (see the box on page 20). The overall benign market conditions in March also helped ensure a smooth completion of the €200 billion Greek debt swap. This took place in the second week of March with very limited impact on other European sovereign bond and credit default swap (CDS) markets. The debt swap triggered payouts on a moderate amount of outstanding CDS written on Greek government bonds. These were settled without difficulty, thus removing earlier investor concerns about the ineffectiveness of hedging sovereign risk via CDS contracts.

Italian and Spanish spreads fall

The spurt of euro area optimism driven by policy actions and growth expectations provided temporary relief for policymakers and investors concerned about the outlook for euro area sovereigns. Yields on both Spanish and Italian government bonds declined significantly (Graph 2, left-hand panel).

Asset prices in global markets

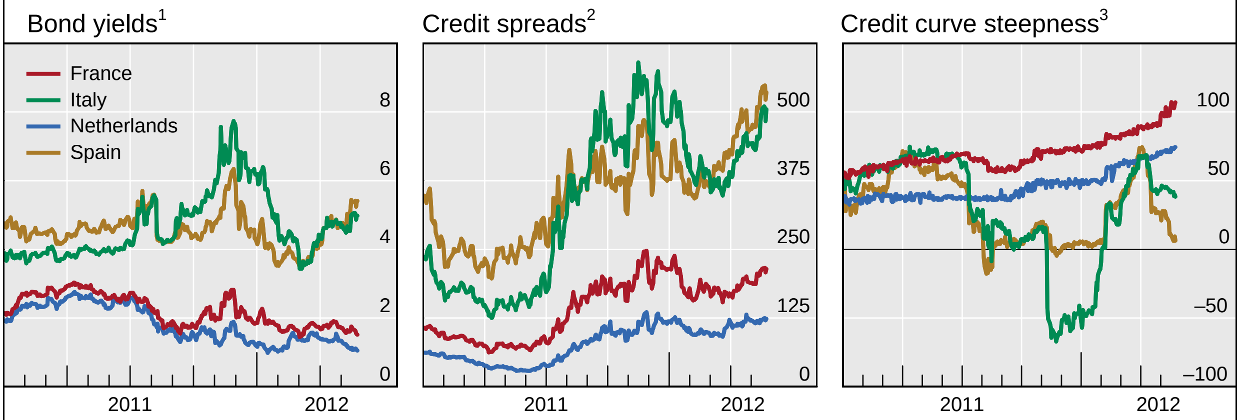
Equity implied volatilities[1] | Credit spreads for financial institutions[2, 3] | Three-month Libor-OIS spreads[2]



[1] Volatility implied by the price of at-the-money call option contracts on stock market indices, in per cent. [2] In basis points. [3] Option-adjusted spread on Merrill Lynch Global Broad Market Financials index.

Sources: Bank of America Merrill Lynch; Bloomberg; Datastream. Graph 1

Euro area sovereign bonds and CDS



[1] Five-year government bond yields, in per cent. [2] Five-year CDS, in basis points. [3] Difference between 10-year CDS and two-year CDS spread, in basis points.

Sources: Bloomberg; Markit; BIS calculations. Graph 2

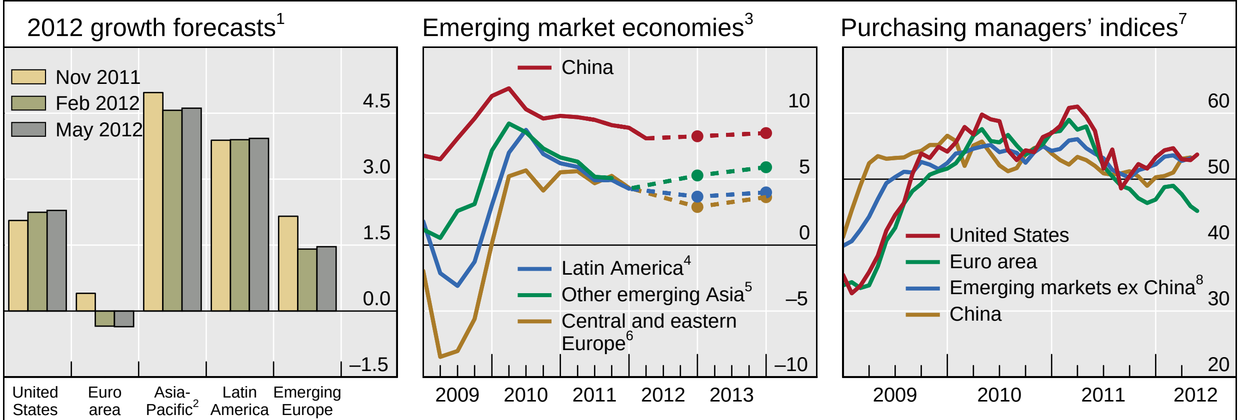
This may in part reflect large bond purchases by Italian and Spanish banks in both primary and secondary markets following the ECB's LTRO. Spanish and Italian sovereign credit spreads also fell as investor fears subsided (Graph 2, centre panel). The more positive view was similarly reflected in the slope of the credit risk curve, which became less flat (Graph 2, right-hand panel). The improvement was particularly strong for Italy, with the Italian credit curve regaining its positive slope after having been inverted during the last two to three months of 2011.

Improved global economic outlook

Recovery optimism takes hold

As euro area strains eased, market participants focused on the global growth outlook. Positive news about the US economic recovery led market participants

Global growth outlook and patterns



[1] Consensus forecasts, in per cent. [2] Excluding Japan. [3] Annual changes in real GDP, in per cent. Actual (quarterly) data up to 2011. Forecasts for full-year 2012 and 2013 growth are shown as dots. For regions, weighted averages based on 2005 GDP and PPP exchange rates. [4] Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela. [5] Hong Kong SAR, India, Indonesia, Korea, Malaysia, the Philippines, Singapore and Thailand. [6] The Czech Republic, Hungary, Poland, Russia and Turkey. [7] Levels above (below) 50 indicate an expansion (contraction). [8] Hong Kong SAR, Hungary, India, Mexico, Russia, Singapore, South Africa and Turkey.

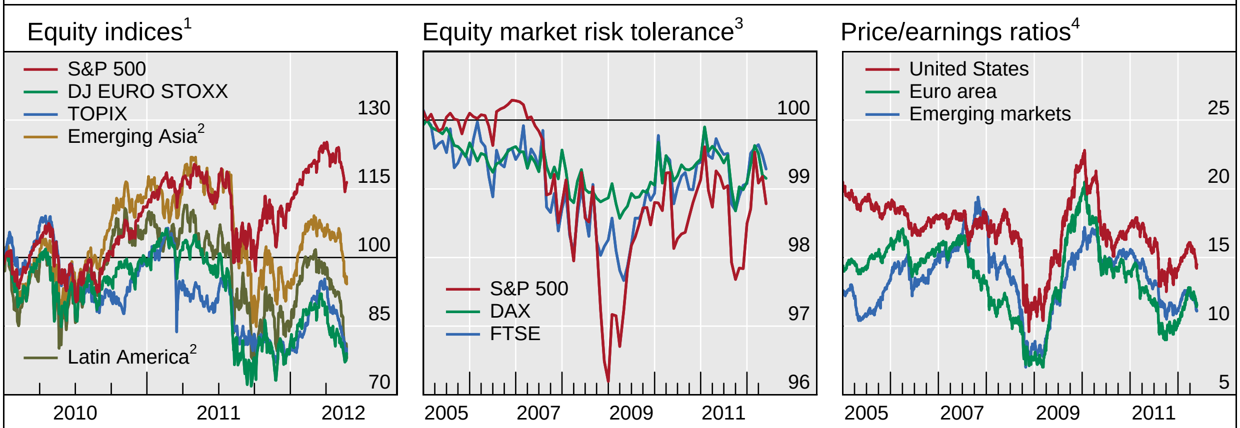
Sources: Bloomberg; © Consensus Economics; national data; BIS calculations. Graph 3 to revise upwards their US growth expectations (Graph 3, left-hand panel). Labour market figures for the US economy, partly reflecting benign weather conditions, also showed signs of improvement. Output growth in Japan recovered moderately, owing to post-earthquake reconstruction. The resilience of growth in major emerging economies (particularly in Asia) likewise supported a more optimistic outlook for the global economy (Graph 3, centre panel).

Driven by higher risk appetite and improved growth expectations, equities and other growth- and risk-sensitive assets performed strongly until the end of March. US and Asian equity markets firmed the most, in line with the better macroeconomic outlook for these regions (Graph 4, left-hand panel). The S&P 500 gained about 12% in the first quarter, the largest one-quarter increase for a decade, despite a slowdown in projected earnings increases. Valuation ratios for equity markets in advanced and emerging economies also picked up, recovering from the lows seen in late 2011 (Graph 4, right-hand panel). The discrepancy between changes in valuations and expected earnings suggests that the former were driven mostly by increased investor willingness to take on risk (Graph 4, centre panel). Price/earnings ratios for the US and European markets, however, remained below historical averages, whereas emerging market valuations continued to be close to historical averages.

Equities and commodities rise as sentiment improves

Optimism about the recovery also had a visible influence on commodity markets, with both energy and industrial metal prices seeing continued upward pressure (Graph 5, left-hand panel). This was primarily due to tight demand and supply constellations, although in the case of oil concerns about potential further supply disruptions and geopolitical risks added to the pressure, and crude oil traded above $100 per barrel for a large part of the period. The positive outlook and expected higher prices also led financial investors to increase their net long positions in commodities futures for both oil and metals (Graph 5, centre panel). For oil in particular, there was clearly a long-run expectation of continued consumption growth, as demand from China and other emerging economies is expected to remain strong (Graph 5, right-hand

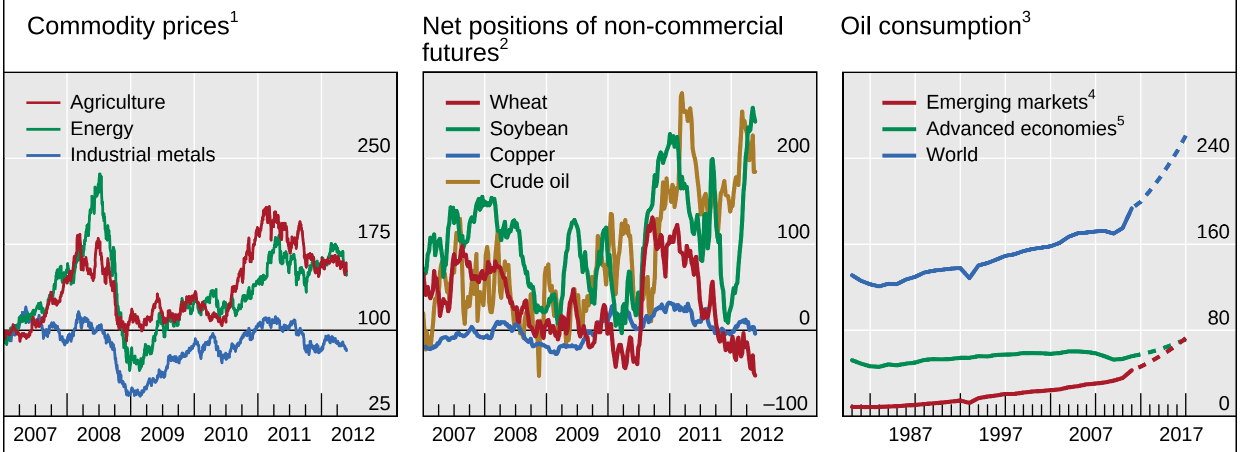
Equity market indicators



[1] 4 January 2010 = 100. [2] MSCI indices, in US dollar terms. [3] Derived from the differences between the left tails of two distributions of returns, one implied by option prices, the other based on actual returns estimated from historical data. An upward movement indicates an increase in risk tolerance; January 2005 = 100. [4] For Datastream equity market indices.

Sources: Bloomberg; Datastream; BIS calculations. Graph 4

Commodity prices and oil consumption



[1] S&P GSCI commodity indices, 1 January 2007 = 100. [2] Number of contracts, in thousands. [3] Expressed in quadrillions of BTUs. Dashed lines show oil consumption assuming constant oil intensity based on 2010 figures and GDP forecasts for 2011–17. [4] Brazil, China, India and Korea. [5] Germany, Japan, the United Kingdom and the United States.

Sources: IMF, *World Economic Outlook*; US Energy Information Administration; Barclays Capital; Bloomberg; BIS calculations. Graph 5

panel). In contrast to energy and metals, agriculture price increases were limited due to better expected harvests, particularly for wheat. This should, however, be seen in the context of the historically extremely difficult global weather conditions in previous years.

Euro area uncertainties return

Optimism in financial markets began to evaporate in the second half of March on the back of renewed concerns about euro area growth, especially in Spain and Italy. The mood shifted as it became increasingly clear that monetary policy actions alone would not be sufficient to resolve underlying euro area economic problems. A trickle of weaker than expected economic data cast further doubts on the strength of the global growth recovery.

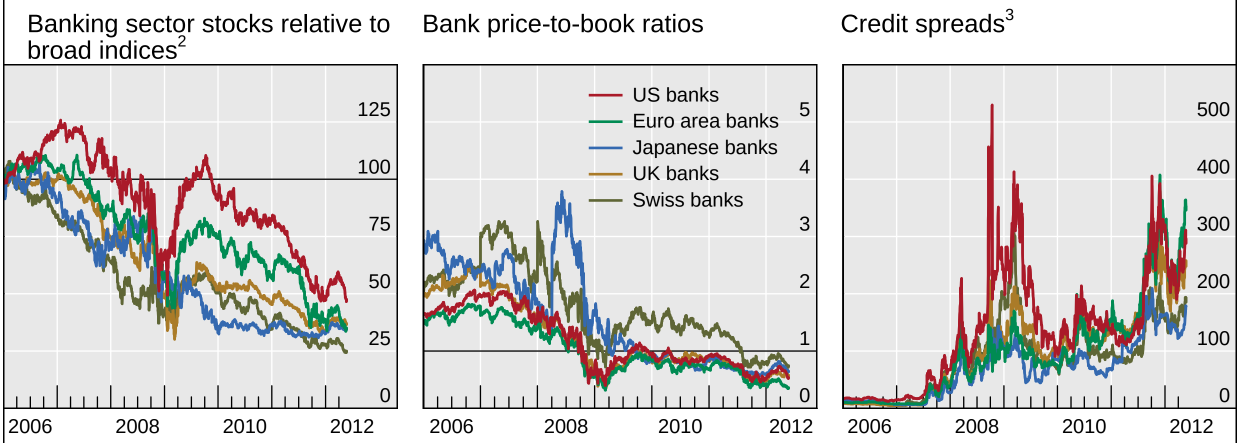
Spanish and Italian yields rise …

Fading LTRO market impact, worries about a possible negative short-term growth impact of fiscal consolidation in Spain and the slow pace of labour market and other structural reforms in Italy were reflected in rising sovereign bond yields. Between mid-March and early April, Spanish and Italian yields edged up significantly (Graph 2, left-hand panel). Sovereign spreads against German bunds widened considerably over this period. Early releases of weak euro area purchasing managers' indices (Graph 3, right-hand panel) and less positive business climate surveys also contributed to a somewhat less positive growth picture for France and Germany.

… as worries intensify

Investors also retreated when Standard & Poor's downgraded Spain and several of the country's biggest financial institutions on 26 April. The sovereign rating was lowered two notches to BBB+. This was clearly reflected at a €2.5 billion bond auction on 2 May, with yields surging by around 140 basis points for shorter-term bonds. The change to a more negative outlook for the euro area was also reflected in the early May statement by the ECB, which no longer contained references to inflationary upside risks and described longer-term risks to inflation as broadly balanced.

Bank equity valuations and credit spreads[1]



[1] Simple average across sample of major banks. For the United States, Bank of America, Citigroup, Goldman Sachs, JPMorgan Chase and Morgan Stanley; for the euro area, Banco Santander, BNP Paribas, Crédit Agricole, Deutsche Bank, ING Group, Société Générale and UniCredit SpA; for Japan, Mitsubishi UFJ, Mizuho and Sumitomo Mitsui; for the United Kingdom, Barclays, HSBC, Lloyds and RBS; for Switzerland, Credit Suisse and UBS. [2] Equity prices of sample banks as a ratio of their respective broad indices; 2005 = 100. For the United States, S&P 500; for the euro area, EURO STOXX 600; for Japan, Nikkei 225; for the United Kingdom, FTSE 100; for Switzerland, SMI. [3] Senior five-year CDS spreads, in basis points.

Sources: Bloomberg; Datastream; BIS calculations. Graph 6

Weaker than expected US recovery …

Fading recovery momentum in the United States added further strains to an already uncertain outlook about the health of the global economy. Weaker than expected data on payroll growth released on 6 April weighed heavily on market sentiment. The March increase of only 120,000 in the early release of US non-farm payroll employment figures was well below expectations and pointed to a still fragile US economic recovery. The strongest market reactions were seen in European equity and bond markets when they reopened after the Easter weekend. The renewed scepticism meant that bond yields in major advanced economies fell to record lows. This most likely reflected a flight to safety by investors combined with expectations of continued accommodative monetary policies in advanced economies. Flight to safety effects also became apparent when Swiss six-month T-bills were sold at a negative yield of 25 basis points on 10 April.

… prompts a flight to safety

Global equity prices began to decline in late March and volatility increased as recovery hopes began to fade and concerns about the European situation resurfaced (Graph 4, left-hand panel). This was in stark contrast to the strong recovery of equity markets early in the year, which had largely been driven by shrinking risk aversion, lower perceived tail risk (Graph 4, centre panel) and the recovery outlook.

Bank equity prices decline …

The resurfacing of uncertainty was reflected in plummeting bank equity prices. Euro area, US and Swiss bank equity prices continued to underperform the broader market (Graph 6, left-hand panel), further depressing market valuations. Most starkly, market capitalisations of euro area bank equity were below 50% of tangible book value at the end of April 2012. Price-to-book ratios for banks have slumped to historical lows in most countries in the aftermath of the crisis, pointing to what could be a structural shift in valuations (Graph 6, centre panel). The low valuation of bank equity no doubt reflects in part assessments of growth opportunities and earnings potential, which investors consider to be fairly bleak for most banks. There are several additional possible explanations for the significant decline in bank equity valuations. Investor concerns about opaque balance sheets as well as the continued lack of loss recognition and the possible impact of further bank rating downgrades are adding to investor uncertainty, thereby raising risk premia on bank equity. Higher uncertainty and risk perceptions were also reflected in banks' CDS premia, which remained highly elevated for euro area, UK and US banks (Graph 6, right-hand panel).

… as uncertainty rises

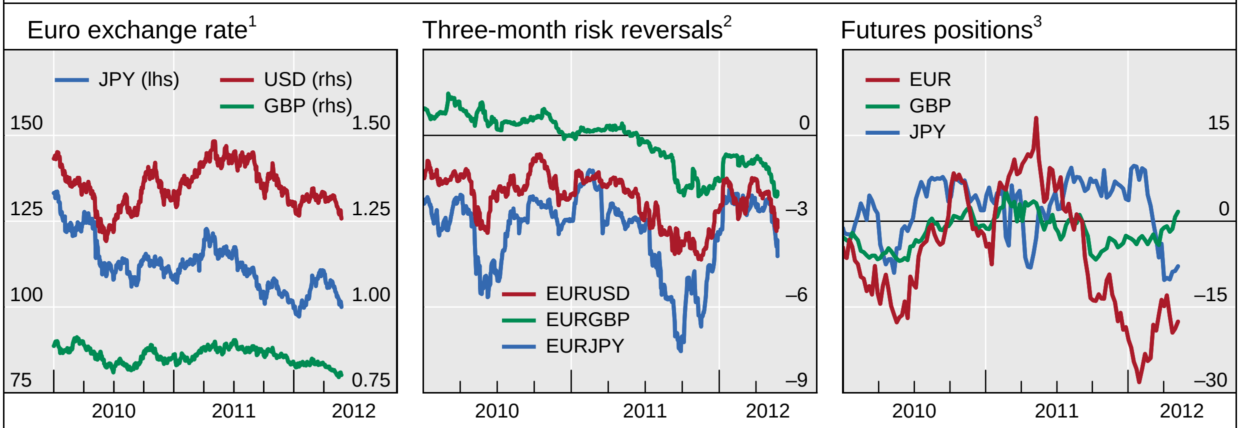
European banks' issuance of unsecured long-term debt remained positive, but began to taper off again during April. Market conditions nevertheless remained difficult for a number of banks from the euro area periphery which found it difficult to place unsecured debt with investors. Market participants, however, regarded this as less worrisome than during the second half of 2011, most likely in light of the buffers built up by the high bond issuance in the first quarter and the ample longer-term funds provided by the ECB's LTROs. Survey data for the euro area, however, indicated a continued tightening of lending standards and weak demand for bank credit.

Political uncertainty adds further strains

Euro area political developments …

Market developments during May clearly indicated that euro area political events significantly added to investor uncertainty. The new EU fiscal compact is still subject to parliamentary consideration in several countries as well as an Irish referendum (to be held on 31 May). The resignation of the Dutch coalition government on 23 April over budgets added further to the uncertainty, as reflected in the 70 basis point widening of the spread between 10-year Dutch bonds and German government bonds. Initial market reactions to the presidential election in France and the Greek parliamentary election, both held on 6 May, were mixed. Greek and French as well as Asian equity markets

Euro exchange rate risk indicators



[1] An increase indicates an appreciation in the euro. [2] The risk reversal is a measure of the skew in the demand for out-of-the-money options at high strikes compared to low strikes and can be interpreted as the market view of the most likely direction of the spot movement over the next maturity date. It is defined as the implied volatility for call options minus the implied volatility for put options on the base currency with the same delta (25), in per cent. [3] Non-commercial net long positions, in billions of US dollars.

Sources: Bloomberg; CFTC; Datastream; BIS calculations. Graph 7 declined. Yields on Greek bonds initially rose by nearly 2 percentage points and other southern European government bonds also experienced yield increases. Equity markets in the rest of Europe and the United States, however, quickly recovered, and an auction of French short-term government bonds went smoothly. In the days that followed, post-election political deadlock in Greece and concerns about Spanish banks added to the uncertain outlook for the euro area. In this challenging environment, investor worries about a possible Greek exit from the euro and potential wider impact intensified.

… add downside risk

The most visible initial market reaction was in foreign exchange markets, where the euro started to depreciate against the US dollar (Graph 7, left-hand panel). At the same time, option prices pointed to a sharp increase in perceived depreciation risk for the euro against other major currencies (Graph 7, centre panel). That said, the levels are still quite moderate compared to those in the second half of 2011. At the same time, data on outstanding futures contracts continue to point towards financial investors expecting the euro to weaken (Graph 7, right-hand panel). Positioning data pointed to sterling being used as a hedge against negative euro surprises. Sterling may also have benefited from shifts in currency allocations of sovereign foreign exchange reserves.

Emerging market inflows weaken as growth moderates

Concerns about the growth outlook for the advanced economies also prompted investors to reconsider the resilience of emerging market growth.

Chinese growth moderates

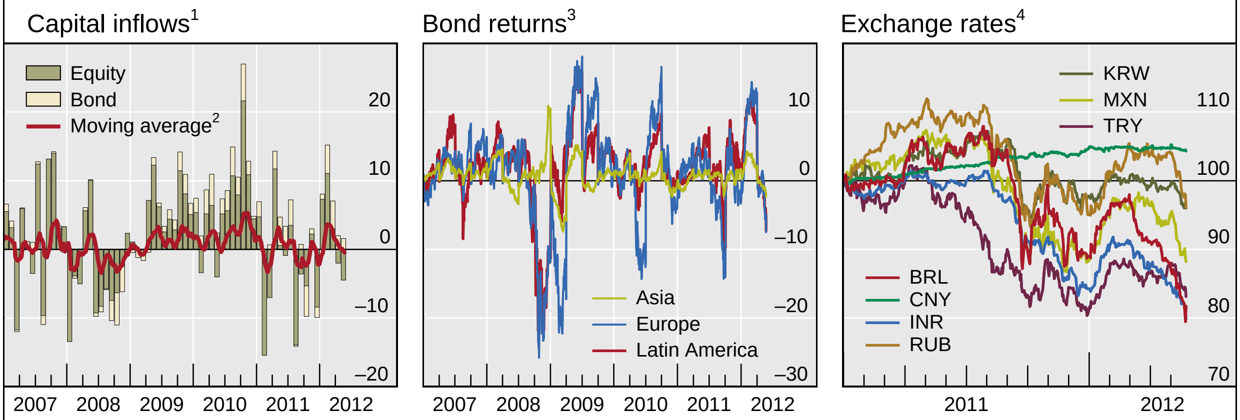
In China, economic indicators confirmed that growth is gradually slowing as a result of last year's policy tightening and lower external demand. Economic data for April on industrial production, trade, investment, and real estate prices and investment confirmed that the economy decelerated along a manageable path. The combination of slower growth, lower inflation and continued declines in house prices in most Chinese cities prompted the Chinese central bank to quickly lower banks' reserve requirement ratio on 12 May, citing the need to achieve a stable increase in economic growth. The move prompted expectations of further monetary policy easing. Consistent with this, one-year non-deliverable renminbi/US dollar forwards began to price in a mild depreciation of the renminbi against the US dollar during the first half of May.

Economic indicators also pointed to a growth slowdown in Latin America and eastern Europe. Responding to slower growth and easing inflationary pressures, the Central Bank of Brazil cut its policy rate by 75 basis points to 9% in April. This meant that the policy rate is now 300 basis points lower than its recent peak in 2011. This put further downward pressure on the Brazilian real, which depreciated significantly against the US dollar in April (Graph 8, right-hand panel).

Emerging market inflows moderate …

After a brief spell of strong capital inflows in the first two months of the year, inflows into emerging market economies slowed down starting in March (Graph 8, left-hand panel). The lower capital inflows were reflected in the returns on emerging market bonds, which declined sharply towards the end of the period, particularly compared to the high returns earlier in the year

Capital flows and asset prices in emerging markets



BRL = Brazilian real; CNY = Chinese yuan; INR = Indian rupee; KRW = Korean won; MXN = Mexican peso; RUB = Russian rouble; TRY = Turkish lira.

[1] Sum of weekly data until 23 May 2012; for China, Chinese Taipei, Hong Kong SAR, India, Indonesia, Korea, Malaysia, the Philippines, Singapore, Thailand, Argentina, Brazil, Chile, Colombia, Mexico, Peru, Venezuela, the Czech Republic, Hungary, Poland, Russia, South Africa and Turkey, in billions of US dollars. [2] Six-week moving average. [3] JPMorgan GBI-EM Traded Indices, total return QTD, in US dollar terms. [4] 31 December 2010 = 100; an increase indicates an appreciation against the US dollar.

Sources: Datastream; EPFR; JPMorgan Chase; BIS calculations. Graph 8

(Graph 8, centre panel). A similar pattern had prevailed during the latter part of 2011.

… but increase again as uncertainty intensifies

Inflows to emerging market bond funds increased significantly during the first weeks of May as euro area uncertainties returned. In contrast, funds focused on western European bonds saw outflows. Meanwhile, emerging market equity funds were more clearly affected by the less favourable growth outlook, and began to experience outflows during April. Emerging market exchange rates also reflected the change in mood during April and May, with a large number of currencies giving up all their earlier gains relative to the US dollar (Graph 8, right-hand panel).