# 1. Overview: improving outlook lifts markets

An improving economic outlook underpinned a rebound in equity and credit markets between mid-May and mid-August. Equity markets rose on strong earnings reports, reaching their highest level in several years in Japan and Europe. Conditions in credit markets stabilised, helping corporate spreads to tighten from their May highs. Meanwhile, emerging market spreads approached the historical lows seen earlier in the year, despite strong issuance by emerging market borrowers in international debt markets.

A series of surprises did little to disrupt the momentum in markets. The terrorist attacks in London in July failed to dampen investor enthusiasm. Political uncertainty in Brazil and the Philippines had only a passing influence on emerging markets. The long anticipated revaluation of the Chinese renminbi was received calmly, with little lasting impact on prices in the major financial markets. Eventually, however, concerns about high oil prices helped to erase some of the gains in equity and credit markets.

Investors' appetite for riskier assets continued to be supported by the low level of nominal yields. Signs of robust growth and upward revisions to the expected path of policy rates did lead to increases in long-term yields between late June and mid-August, in the dollar and yen markets especially. However, yields failed to break out of the range in which they have been trading for the past year.

#### Equity markets surge on strong earnings

Stock markets recover ...

Equity markets recovered strongly starting in May, bouncing back from the sell-off in March and April (Graph 1.1). From its most recent low on 13 May to 26 August, the S&P 500 gained more than 4%. The DJ EURO STOXX and TOPIX rose by even more, to their highest levels in several years. Equity markets in Latin America and emerging Asia posted a still stronger performance over the period, rising by 19% and 9%, respectively.

... on surprisingly strong earnings ...

The key driver of equity markets was surprisingly strong corporate earnings. Investors had expected earnings growth to slow in 2005 from 2004's exceptionally fast pace. However, earnings have not slowed as much as expected. In Europe and the United States, corporate earnings increased by more than 10% year over year in the second quarter of 2005, down from a year ago but still several percentage points higher than anticipated earlier. In fact,

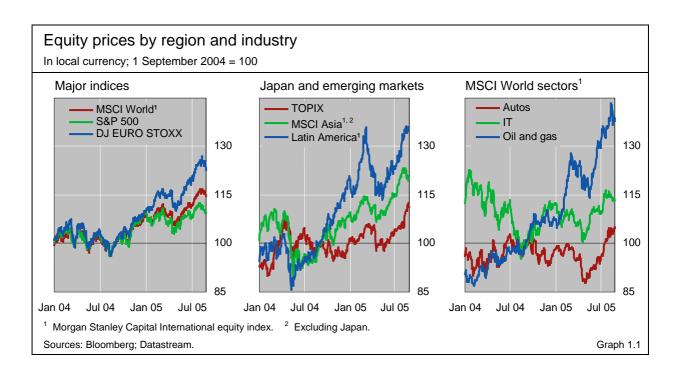
for the second quarter of 2005, the number of S&P 500 companies which announced higher than expected earnings exceeded those announcing lower than expected earnings by the widest margin since March 2004 (Graph 1.2). Earnings announcements in Europe show a similar pattern. Prominent retailers such as Amazon and Wal-Mart easily beat expectations, as did technology bellwethers such as Microsoft and eBay. Auto manufacturers' earnings tended to surprise on the upside as well, especially in Europe, where Fiat and Volkswagen reported profits well above analysts' forecasts. Better than expected profits from AIG, the large insurer which had revealed accounting irregularities earlier in the year, contributed to a rise of nearly 1% in the S&P 500 during the morning session of 10 August.

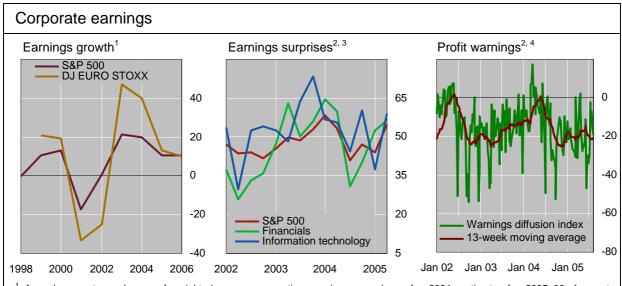
An improvement in the economic outlook reinforced the rally in equity markets, particularly in the United States and Japan. In the United States, a series of unexpectedly strong economic indicators, including ISM numbers in July and August and the non-farm payroll report in August, pointed towards a continuation of robust growth (Graph 1.3). In Japan, good macroeconomic news, such as a favourable *Tankan* survey in July and a very strong machinery orders report in August, led economists to raise their growth forecasts.

... and good economic news ...

Further increases in oil prices initially did little to dampen investors' enthusiasm. The price of Brent crude rose steadily from \$47 per barrel in mid-May to a record high (in nominal terms) of \$67 in mid-August. Rising energy prices were one of the factors often cited in warnings by companies about the outlook for profits. Yet in the first half of 2005 firms appear to have been able to offset rising raw material and energy costs with higher sales prices and further cost cutting, thereby maintaining or even increasing their profit margins. In late August, investors seemed to become more concerned about whether this would continue in the second half of 2005, and equity markets gave up some of their earlier gains.

... and were relatively unfazed by higher oil prices





<sup>1</sup> Annual percentage change of weighted average operating earnings per share; for 2004, estimate; for 2005–06, forecast.
<sup>2</sup> Companies included in the S&P 500 Index.
<sup>3</sup> Number of companies which announced higher than expected quarterly earnings minus the number which announced lower than expected earnings; as a percentage of companies announcing quarterly earnings.
<sup>4</sup> Number of companies which announced positive revisions to their earnings outlook minus companies which announced negative revisions; as a percentage of companies announcing positive, neutral or negative revisions.

Sources: Bloomberg; I/B/E/S; BIS calculations.

Graph 1.2

Investors remained sensitive to changes in the anticipated pace of monetary tightening, in particular to signs of overheating in the United States which might precipitate a less "measured" pace of tightening. Upward revisions to the expected path of US policy rates in June and July did not derail the rally in equity markets because the revisions were accompanied by a strengthening of the outlook for growth (see below). By contrast, the greater than expected non-farm payroll number on 5 August heightened concerns that the Federal Reserve might have to accelerate the pace of monetary tightening to avoid a build-up of inflationary pressures, and so led to a marked decline in global equity markets that day. The largest daily increase in the S&P 500 during the rally, of 1.2%, occurred on 8 July when the employment report for June slightly undershot expectations, relieving concerns of overheating in the economy.

A sign of the underlying strength of the rally was equity markets' resilience to the terrorist attacks in London on 7 July. In contrast to the attacks in the United States in September 2001, those in London did not damage any of the infrastructure supporting the city's substantial financial market activity. As a result, trading continued as normal. The FTSE and DJ EURO STOXX did fall by around 1½% on the day of the attack. However, the fall was quickly reversed and both indices returned to their pre-attack levels within days. This also contrasted sharply with the terrorist attack in Madrid in March 2004, when the indices took more than one month to recover.

Equity markets also proved resilient to the revaluation of the Chinese renminbi on 21 July (see the box on page 7). Initially the shares of Japanese exporters were hard hit by the revaluation, because of expectations that a major appreciation of the Japanese currency might follow. The yen appreciated by 2% against the US dollar on the day of the revaluation and the Tokyo market fell by more than ½% when it opened the next day. However, as the

Markets prove resilient to the terrorist attacks in London ...

... and the revaluation of the Chinese renminbi

related yen appreciation proved short-lived, so did the impact on the market, which was back to pre-revaluation levels in less than a week. Other Asian markets tended to rise in the days following the announcement, and China's Ashare market jumped by 2.5%. US and European markets were little changed.

In Japan, political uncertainty unsettled the Tokyo market in the first week of August. Prices fell sharply on 5 August amidst increasing expectations that the postal service privatisation bill would be rejected. But following the bill's defeat on 8 August and the announcement of national elections, Japanese shares rose.

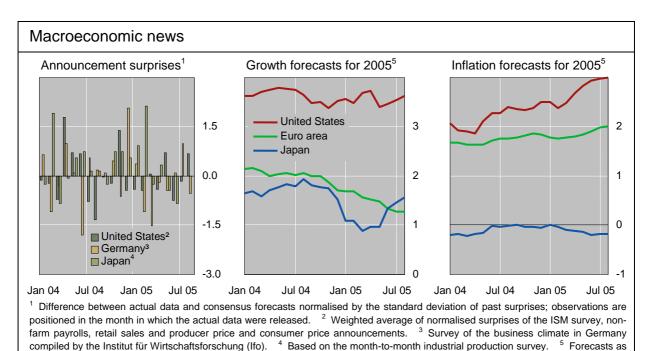
In contrast to better than expected earnings, the turnaround in global equity markets does not appear to owe much to any surge in risk appetite (Graph 1.4). To be sure, measures derived from the prices of equity index options and their relationship to realised volatility had pointed to a sharp increase in risk appetite in the United States and Germany in the late spring and early summer. However, these indices subsequently fell back in August as implied volatilities rose. The principal component of risk appetite measures based on the DAX, FTSE and S&P 500 was in August close to the levels that had prevailed after the equity market sell-off in March and April and well below the highs estimated at the end of year 2004.

Risk appetite remains subdued ...

Comparatively subdued risk appetite perhaps explains why, despite the rally in equity markets, price/earnings multiples in the major markets remained in line with their historical averages when based on forward earnings. Based on earnings growth of 11% over the next year, in August the price/earnings ratio for the S&P 500 equalled about 15, compared to its 1990s average of 16. Historically, analysts have tended to overestimate earnings growth, and so current earnings forecasts may yet prove optimistic. However, for the past several quarters earnings have in fact exceeded analysts' forecasts.

... with P/E ratios in line with historical averages

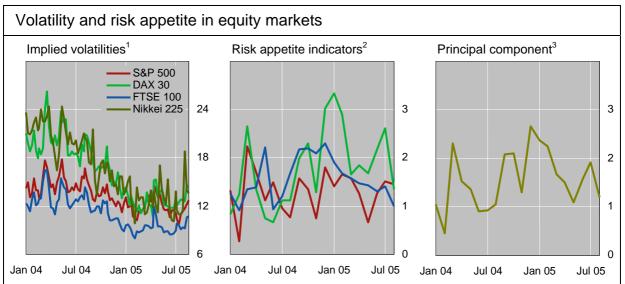
Graph 1.3



published monthly by Consensus Economics; observations are positioned in the month in which the forecast was made; percentage

change over the previous year.

Sources: Bloomberg; © Consensus Economics; BIS calculations.



<sup>&</sup>lt;sup>1</sup> Price volatility implied by the price of at-the-money call option contracts on stock market indices; weekly averages. <sup>2</sup> Derived from the differences between two distributions of returns, one implied by option prices, the other based on actual returns estimated from historical data. <sup>3</sup> As the first principal component of the three risk appetite indicators.

Sources: Bloomberg; Chicago Mercantile Exchange; Eurex; London International Financial Futures and Options Exchange; BIS calculations.

Graph 1.4

#### Credit markets rebound

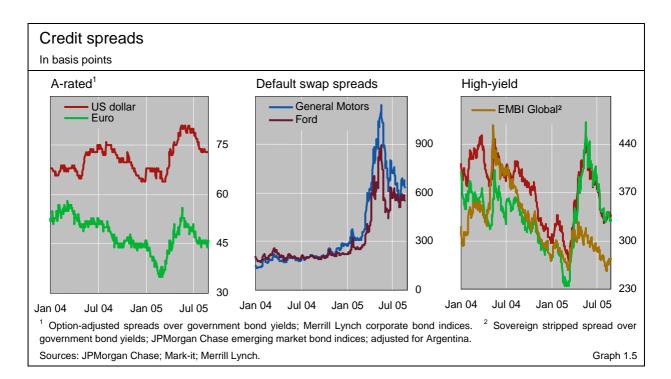
below their May high.

Credit spreads tighten steadily ...

The rebound in investors' confidence apparent in equity markets was equally evident in credit markets. After widening between mid-March and mid-May, corporate bond and credit default swap spreads tightened steadily over the subsequent three months. The spread between A-rated corporate bonds and US Treasuries, which had risen from 65 basis points on 16 March to 81 basis points on 18 May, fell to 73 basis points by 26 August (Graph 1.5). High-yield corporate spreads rallied even more strongly, tightening to 334 basis points by 26 August, only 63 basis points above their March low and 123 basis points

... as spillover from spring dislocation in credit derivatives markets proves limited The limited degree to which dislocation in credit derivatives markets in early May – triggered by the downgrade of General Motors and Ford – had spilled over to other segments of credit markets helped to bolster investor confidence in late May and June. Fears of financing difficulties at one or more large financial institutions and of the liquidation of hedge fund assets proved unfounded. Some hedge funds, especially those involved in convertible arbitrage trades, did experience large losses in the first half of 2005 and were wound up. However, hedge funds overall continued to enjoy net inflows of new money in the second quarter. Liquidity in the index tranche market was slow to return, and leveraged loans reportedly replaced synthetic instruments as the main source of collateral in new issues of collateralised debt obligations (CDOs). Yet CDO issuance rebounded strongly in June and July from depressed levels in May, suggesting that no lasting damage was done to the functioning of credit derivatives markets.

Nevertheless, the events of May 2005 left unanswered questions about how credit markets might perform if confronted with a widespread deterioration



in credit quality. Credit derivatives have undoubtedly enhanced the liquidity of credit markets in general and facilitated the management and monitoring of credit risk exposures. At the same time, the complexity of some products and the associated risk management systems, the growing presence of leveraged players in credit markets and the possibility that investment strategies may be less diverse than anticipated make it difficult to predict how credit markets will function under more stressful conditions.

That being said, the near-term likelihood of a widespread deterioration in credit quality remains low. Strong economic and earnings growth in recent months has helped to restore credit investors' confidence in the outlook for credit quality after the sell-off. Admittedly, short-term borrowing has picked up in recent quarters, among US firms in particular, and the ratio of rating upgrades to downgrades appeared to peak in the early part of 2005. Furthermore, Standard & Poor's expects speculative grade default rates to rise gradually over the next year. However, default rates are forecast to remain well below their long-term average. Indeed, corporate balance sheets in the United States, Europe and Japan remain stronger than they have been for many years.

Just as auto manufacturers had led the sell-off in credit markets earlier in the year, they similarly led the most recent rally (Graph 1.5). Notwithstanding the relegation of General Motors and Ford by most of the major rating agencies to below investment grade, the companies' debt still comprises a significant share of many investors' portfolios. Furthermore, it is referenced in numerous structured products. Investors took heart from steps by General Motors to obtain a higher, possibly investment grade rating for its finance subsidiary, General Motors Acceptance Corporation (GMAC).

Strong fundamentals restore confidence

Auto sector leads rally

#### Managing the renminbi regime shift

### Guonan Ma, Corrinne Ho, Robert McCauley and Eli Remolona

On Thursday 21 July 2005, the People's Bank of China (PBC) announced a change in the renminbi exchange rate regime, from a de facto peg against the US dollar to a managed float with reference to a basket of currencies. This move was accompanied by a 2% step appreciation against the dollar and the institution of a  $\pm 0.3\%$  daily fluctuation band in the bilateral dollar exchange rate. In the days that followed, the PBC clarified its intentions regarding further moves in the exchange rate and named the currencies included in the basket. This box reviews post-announcement developments in financial markets, and discusses some of the possible reasons for the relatively limited fallout to date from the shift in regime.

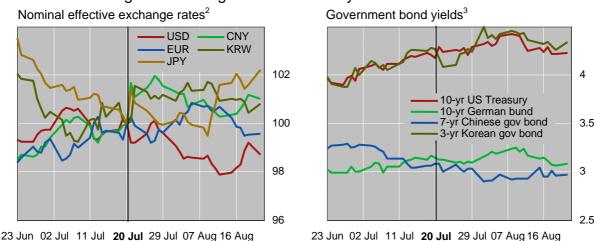
Currency markets took this long-awaited policy event in their stride. Currencies in Asia first reacted in knee-jerk but orderly fashion, with five Asian currencies initially matching the step move of the renminbi spot rate: the Korean won, Japanese yen, Thai baht, Singapore dollar and New Taiwan dollar. The responses of other Asian currencies were relatively mild, while the reaction of the euro and Australian dollar was muted. The one-year Hong Kong dollar forward moved just 0.2%, while the Malaysian ringgit spot exchange rate gained less than 1% against the dollar.

Beyond the first day after the 21 July announcement, developments seemed to be dominated as before by movements in the major currencies, especially the yen against the dollar. In effective terms, three of the "major currencies" in the PBC basket, the yen, euro and won, appreciated in the following weeks while the dollar depreciated. The nominal effective exchange rate of the renminbi appreciated mildly relative to its pre-announcement level but by late August had depreciated by around 0.5% since the 2% step appreciation (Graph A).

Major bond markets worldwide were largely undisturbed by the policy shift, although there were temporary moves. During the first London and New York trading hours after the announcement, the benchmark 10-year US Treasury yield rose by 10 basis points. While this is a large response for news from currency markets, it was equivalent to the usual reaction to an average positive surprise in a US non-farm payroll announcement, in which the headline number is 80,000 above expectations. This initial reaction seemed to reflect expectations of reduced Chinese demand for US Treasury securities as a result of the new renminbi regime. As US bond yields continued their uptrend, however, the yields seemed to reflect strong data and prospective Fed tightening more than expectations of changes in Chinese demand.

One likely reason for the relatively subdued reaction in financial markets was that the announcement came 12 weeks after a brief episode that market participants considered to have been a "dry run". On 29 April, the renminbi rose beyond its narrow de facto trading band, staying outside the band for 20 minutes. Many market participants thought this was already the regime change and reacted accordingly. At that time, the Australian dollar, won and yen moved the most, appreciating by about 90% of the appreciation of the renminbi's one-year non-deliverable forward (NDF). The US Treasury market sold off briefly after the 29 April event as well.

# Effective exchange rates and government bond yields<sup>1</sup>



 $^{1}$  The vertical lines indicate last closing prices before the announcement.  $^{2}$  20 July 2005 = 100.  $^{3}$  In per cent. Sources: Bloomberg; national data; BIS.

Graph A

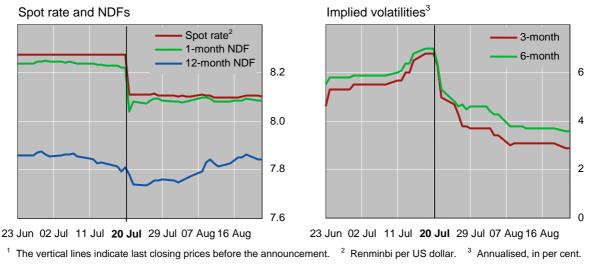
The modest impact of the renminbi revaluation may well also reflect advance preparations by both the Chinese and other authorities. In retrospect, the Hong Kong Monetary Authority's timely operational refinements to the currency board last May focused expectations, albeit at the cost of some loss of local currency market activity to competing dollar markets. The response to the Chinese move within hours by Bank Negara Malaysia, in the form of its own announcement of a regime change, left market players no time to speculate on when the other shoe would drop. Even so, Malaysia's foreign reserves jumped nearly \$3.5 billion in July as dollar purchases, most of them on 22 July, absorbed inflows into the local debt securities markets. China's reserve growth for July was boosted by the drawdown of residents' foreign currency deposits at banks in China by almost \$5 billion, a reaction to fears of further appreciation, notwithstanding a 50 basis point hike in interest rates on dollar deposit accounts on 21 July. On 23 August, the PBC raised the same deposit rate by another 37.5 basis points.

The PBC has to date managed market expectations to avoid the kind of dollar selling that many might have predicted under the circumstances. Following the announcement, the response of the renminbi NDF to the spot rate's opening 2% stronger suggested that the surprise was mostly in the timing of the announcement. As shown in Graph B below, while the one-month NDF moved by about 2%, the 12-month NDF strengthened by only about 500 pips (or 0.7%) overnight, suggesting little impact on the expected level of the renminbi spot rate over the one-year horizon. In fact, while the one-year outright seemed to suggest a 7% appreciation relative to the prevailing dollar spot on the eve of the move, it pointed to only a 3% appreciation by late August. Given the slow pace of spot appreciation during this period, trading in shorter-term NDF contracts has also reflected a gradual easing of expectations of further appreciation in the near term.

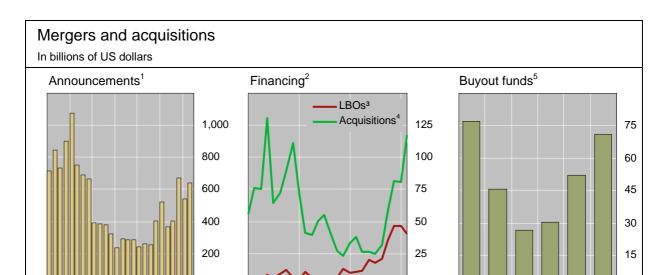
Even though renminbi option markets are not the most liquid, they too convey an impression of well contained expectations. Implied volatilities of the renminbi NDF had spiked on several previous occasions of heightened sensitivity to the possibility of a regime change. A sharp rise in late November 2004 followed a Chinese policymaker's remarks highlighting US data showing small purchases of US Treasury securities by Chinese residents. Another spike followed the events of 29 April, discussed above. In the lead-up to 21 July, options changed hands at higher prices, suggesting a sense of greater volatility ahead of the move. However, the announcement itself led to a decline in ex ante volatility as reflected in at-the-money options on the renminbi NDF. Implied volatility fell from around 7% on the eve of the announcement to below 4% in mid-August. The announcement evidently resolved some of the uncertainty associated with the nature of the new regime and perhaps also pointed to less volatility than anticipated under the new regime. Lower implied volatility is also consistent with the steady one-year renminbi NDF in the wake of the move, indicating relatively stable long-term expectations.

The Chinese authorities so far seem to have managed the transition to a more flexible regime in a fashion that has had relatively limited effects on financial markets and near-term expectations.

## Exchange rate, non-deliverable forwards and implied volatilities of the renminbi<sup>1</sup>



Sources: Bloomberg; HSBC; national data. Graph B



Global announced M&A transactions. <sup>2</sup> Signings of syndicated loans. <sup>3</sup> Facilities for leveraged and management buyouts. <sup>4</sup> Acquisition lines and facilities. <sup>5</sup> Funds raised by private equity funds focused on LBOs, mezzanine or turnaround financing, or recapitalisations; for 2005, first half-year annualised.

2003

2001

Sources: Bloomberg; Dealogic Loanware; National Venture Capital Association; Thomson Venture Economics; BIS calculations.

Graph 1.6

Concerns over LBOs dissipate ...

1999

2001

2003

2005

1999

Not even the continued strength of leveraged buyouts (LBOs) seemed to faze investors. In the first half of 2005 leveraged buyouts reached their highest level since the 1980s (Graph 1.6). Moreover, deals became larger in size. While LBOs had contributed to the sell-off in credit markets in the second quarter, concerns about them seemed to lessen in June and July. In May, investors announced a plan to buy a majority stake in Italian mobile phone company Wind for €12 billion. In July, private equity investors had little difficulty arranging financing in high-yield bond and leveraged loan markets for the leveraged buyout of SunGard Data Systems. At \$11 billion, this was the largest LBO completed since the buyout of RJR Nabisco in 1989.

n

2000

2002

2004

2005

... as private equity investors exploit opportunities

It attests to the strength of corporate balance sheets that private equity investors now see opportunities to releverage companies. However, perhaps a more important driver of this activity is investors' search for higher returns and the consequent ready availability of financing. In addition to stepping up their investments in hedge funds in recent years, pension funds and other investors have allocated substantial amounts to private equity funds, especially funds specialising in LBOs. In the first half of 2005, buyout funds raised nearly \$36 billion globally, 74% more than in the same period the previous year. At the same time, investors showed a willingness to buy the debt issued to support LBOs, which is often of very low credit quality. For example, over the past year several European companies have issued payment-in-kind bonds, ie securities which will be redeemed with other bonds because the company is not expected to have sufficient cash flow to service the debt. Such bonds allow private equity investors to recover their initial equity investment quickly.

M&A activity picks up globally

Mergers and acquisitions (M&As) by companies have increased even more rapidly than LBOs by private equity funds in recent months. After several years of lacklustre activity, announcements of M&As (including LBOs) in the second quarter reached their second highest level since the fourth quarter of 2000 (Graph 1.6). The pick-up in activity was not limited to the United States but was in fact global, including Europe and Japan. Emerging market companies as well joined the search for acquisitions. For example, Chinese firms competed (in the end unsuccessfully) to buy several well known US companies. With earnings growth slowing (albeit from a very high rate), companies are coming under pressure from equity investors to use their cash flow to maintain the rapid earnings growth rates of recent years. Acquisitions appear to be an increasingly attractive strategy for doing so. To the extent that M&As produce the promised synergies and boost earnings growth, they are not detrimental to creditors' interests. However, the previous wave of M&As, in 1999-2000, tended to erase rather than add value. If the latest pick-up in M&As leads to a releveraging of corporate balance sheets, it could yet contribute to a deterioration in credit conditions.

### Emerging markets find favour with investors

Emerging market spreads were not as adversely affected as corporate spreads by the turmoil in credit markets in May. As a result, they peaked earlier than corporate spreads – in mid-April – and returned more quickly to their previous lows – by early August. On 26 August the EMBI Global (excluding Argentina) closed at 272 basis points, approximately 55 basis points below its April high and not far above its March (and historical) low.

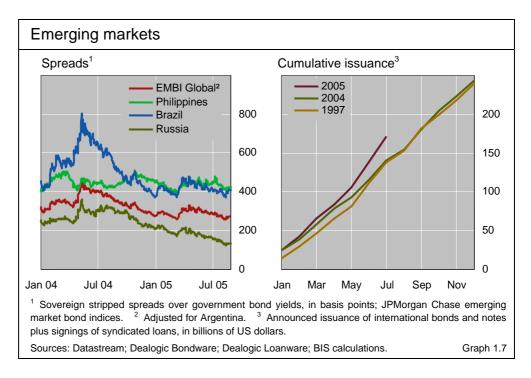
Emerging market spreads return quickly to historical lows ...

Political uncertainty weighed on the spreads of some countries. Spreads on the Philippine government's dollar-denominated bonds widened from approximately 440 basis points in mid-June to nearly 470 basis points in early July even as most other sovereigns' spreads tightened. Investor confidence in the Philippines was undermined by calls for the president's resignation as well as setbacks to the government's fiscal reform efforts. Concerns about the impact of continued political uncertainty on the government's (already weak) fiscal position led Standard & Poor's and Fitch to revise their rating outlooks for the Philippines to negative in mid-June.

... despite some political uncertainties

In Brazil, accusations of corruption led to the resignation of several senior officials in the governing party. Political uncertainty at times caused spreads on Brazilian debt to decouple from emerging market spreads, for example in late July and again in late August. However, in general investors did not seem too concerned about the government's difficulties. In fact, in late July investors were so receptive to Brazilian debt that the government was able to retire most of its outstanding Brady bonds. Brazil exchanged \$4.4 billion in C-bonds – once the most actively traded emerging market bond – for eurobonds. This operation epitomised the improvement in fundamentals in Brazil since the debt restructurings of the 1980s and early 1990s. The issuance of Brady bonds had helped to define emerging market debt as a separate asset class in the early 1990s. The market has since matured: outstanding Brady debt declined from a peak of approximately \$150 billion at the end of 1996 to less than \$50 billion in mid-2005 and now accounts for less than 5% of all international bonds issued by emerging market borrowers.

Brazil retires Brady bonds ...



... while Russia repays Soviet-era debt

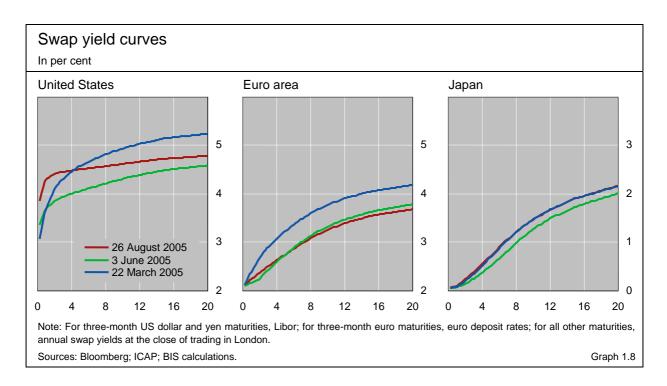
Growing interest in local currency debt

Another country which sought to affirm the turnaround in its credit standing through a debt exchange was Russia. In May, Russia agreed to an early repayment of \$15 billion of Soviet-era debt owed to the Paris Club of official bilateral creditors. The retirement of this debt was facilitated by high oil prices, which have contributed to a sharp improvement in Russia's fiscal situation since the government defaulted in 1998.

Other countries took advantage of the favourable financing conditions to pre-fund their borrowing requirements. Emerging market borrowers raised a record amount in international bond and loan markets in the first seven months of 2005, 22% more than during the same period a year earlier (Graph 1.7). Foreign investors also showed a growing interest in local currency debt (see "The international debt securities market" on page 33). They were attracted by the high interest rates on offer in some local markets and, in some cases, by expectations of an appreciation of the local currency against the US dollar. Mexico, once one of the largest borrowers in international markets, now meets most of its borrowing requirements through local currency debt issues.

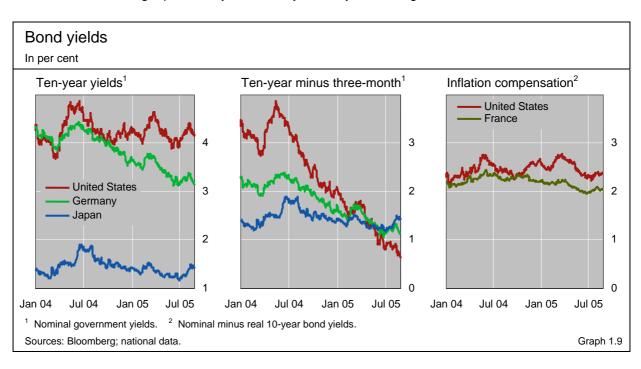
#### Policy rate expectations move up

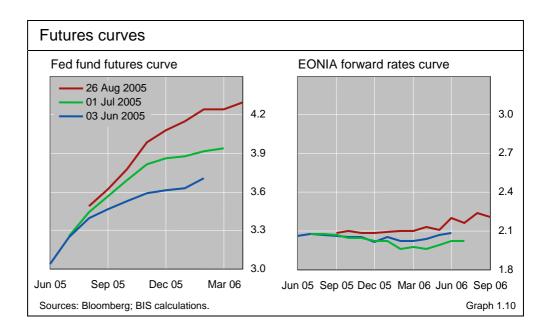
Long-term interest rates remain rangebound at low levels ... Investors' appetite for equities and credit instruments continued to be supported by the low level of nominal yields. Long-term interest rates in the major markets did increase between June and August (Graph 1.8). However, they failed to break out of the range in which they have been trading for the past year (Graph 1.9). In fact, in early June and again late in the month, 10-year US Treasury yields fell as low as 3.9%, their lowest level in over a year. Treasury yields subsequently rose, peaking at 4.4% on 8 August, before retreating again. Long-term yields in the euro and yen markets also remained well below levels of a year ago, notwithstanding an increase in yields between June and August.



Upward revisions to the expected path of policy rates contributed to the increase in long-term rates in most of the major markets (Graph 1.10). In particular, the Fed funds futures contracts expiring in early 2006 were nearly 50 basis points higher in late August than they were in early June, when markets anticipated a significant pause in the rate hike cycle before the end of the year. Even in the euro area, the changing tone of some statements by ECB board members led to a change in the expected direction of the next policy move, from a rate cut by the beginning of next year to a rate hike. In Japan, bond investors took note of comments on 27 July by Bank of Japan Governor Fukui that there was a high probability that the year-on-year change in core CPI

... in the face of upward revisions to expected policy rates ...





... and robust US macro data

might turn positive around the end of the year. His comments accompanied the central bank's upward revision to its economic assessment. While few analysts anticipated an end to the zero interest rate policy in early 2006, the yields on euroyen futures contracts expiring in March 2006 moved up by 5 basis points between June and mid-August.

Robust US macroeconomic data releases typically had a big impact on bond markets during the period. For instance, the well above consensus ISM number, in combination with signs of improving consumer confidence, contributed to an outsize 14 basis point rise in 10-year yields on 1 July; the positive surprise for July payrolls announced on 5 August led to a 7 point rise. Worries about inflationary pressures appeared to play a more marginal role. To be sure, forecasts for near-term inflation increased as oil prices rose (see Graph 1.3, right-hand panel), but monthly announcements on core inflation remained subdued, as did consensus forecasts of inflation at longer horizons. Moreover, the stability in the difference between nominal and indexed yields suggests that the increase in yields in the United States in July and August reflected almost entirely higher real rates (Graph 1.9, right-hand panel).

Economic releases fail to rouse yields in Japan or the euro area

In Japan, yields were much less volatile. Even though economic releases tended to surprise on the upside, individual announcements did not have a significant impact on long-term yen yields. For example, the reaction of bond investors to the announcement of a much better than expected machinery orders report on 9 August was muted by the conservative outlook for orders.

In the euro area, economic data provided little support for higher yields. Economic forecasts for growth continued to be revised downwards and the data flow was mixed. Even strong indicators, such as the positive Ifo surprise on 26 July, did little to rouse bund yields. In fact, one of the largest single increases in bund yields over the period was on 5 August, in reaction to the above consensus US payroll report.

Despite the different cyclical positions of the US, euro area and Japanese economies, the slope of the yield curve was remarkably similar in the three markets. In late August, 10-year government bond yields were between 65 and

140 basis points higher than three-month rates in the dollar, euro and yen markets (Graph 1.9). Moreover, the term structure of euro, yen and especially dollar interest rates has flattened noticeably over the past year. The slope of the euro and yen yield curves steepened slightly in July and August but was still much flatter than it had been in the first half of 2005. A flattening of the yield curve has historically foreshadowed a weakening of economic activity and lower inflation. However, the similarity of the slope of the yield curve in the major markets raises questions about whether the information content of the term structure has changed in recent years.

Flat yield curves globally raise questions about their information content

Even more than in the case of equity markets, the London terrorist attack on 7 July appeared to have only ephemeral effects on bond markets. Although there was outsize intraday volatility in the United States and euro area, with declines in yields initially observed on a flight to safety, the final observed daily declines in yields were rather modest (1 and 4 basis points in the 10-year Treasury and bund markets, respectively). The second attack in London two weeks later had scarcely any market impact.

The renminbi revaluation has only a passing effect

Reactions were more marked following the renminbi revaluation announced on 21 July. Then, on speculation that the revaluation might imply significantly lower demand for US Treasuries, the 10-year yield rose by nearly 10 basis points within a few hours. By contrast, the bund yield briefly fell by nearly 3 basis points in anticipation of a spillover in demand. However, the effect of the renminbi revaluation was short-lived as the future path of the renminbi implied by the regime shift, and the degree to which it signified a diminished demand for dollar assets, remained unclear (see the box on page 7).