Highlights of Recent Trends in Financial Markets

I. Overview

After some significant corrections in the second half of May and in early June, major equity markets have resumed their growth, in some cases regaining levels reached before the May-June contraction. Against a backdrop of healthy corporate balance sheets, robust earnings growth and low default rates, investor sentiment has remained positive, as reflected in these equity market developments and compressed credit spreads. However, there are signs of increasing nervousness, which include the May/June market turbulence and somewhat increased levels of historical and implied volatility. The increased nervousness may reflect in part downward revisions to economic forecasts.

While central banks have continued to withdraw liquidity, short-term interest rates have been rising but such increases have not been fully matched at the long end. As a result, government benchmark bond yield curves have flattened a bit further. In corporate bond markets, after the turbulence earlier in the year spreads have either moved broadly sideways or declined. Viewed over the whole period since the last meeting, these spreads have risen somewhat, but they remain at relatively low levels. With some exceptions, emerging market bond spreads also remain at relatively low levels, even if they have increased from their historical lows.
II. Equity markets

In May and early June, equity markets across the globe experienced major corrections amid investors’ fears of increasing inflation, higher interest rates and in some cases slowing growth prospects (Figure 1). As a result, some major markets dropped back to levels that they had reached in the last quarter of 2005, which for some of them implied losses of up to around 20 per cent from their recent peaks. Those losses were particularly steep in markets where strong gains had been recorded previously, like in Japan or the euro area. Cumulative declines in the Japanese broad market index brought the index on June 13 to its end-of-October 2005 level, a decline of over 20 per cent from its peak on 9 May. The euro area broad market index fell more than 17 per cent over the same period, falling back to January 2006 levels. For the US broad market index, the corresponding loss was slightly less than 9 per cent, but the decline nevertheless wiped out within a few days gains that had been made since the previous November.

In the course of these downward adjustments, volatility of major indices increased substantially, breaking through long-term averages (measured from the beginning of 1990 to date), and continued to rise even after markets had started to regain some strength (Figure 2). Volatilities subsequently receded only in July and August, but have remained above their pre-correction levels of early May, indicating some heightened uncertainty on the part of investors about the future direction of equity markets. The fact that for all major indices historic volatility, a backward-looking measure, has remained well below implied stock market volatility, a forward-looking measure (based on option contracts), corroborates this view.
Figure 1. **Major stock markets**
Total market and financial sector equity price indices, 1 Jan 1998 = 100

**Note:** Datastream indices. Daily data until 6 October 2006.
**Source:** Thomson Financial Datastream.
Figure 2. **Stock markets: implied and historic volatilities**

<table>
<thead>
<tr>
<th>Country/Index</th>
<th>Implied Volatility</th>
<th>Historic Volatility (30 day)</th>
<th>Average Hist. Vol. 01/01/90-06/10/06</th>
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<td>United States – S&amp;P 500</td>
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<td>Japan – AMEX Index</td>
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<td>Euro area – DJ EUROSTOXX 50</td>
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<td>Germany – DAX</td>
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<td>France – CAC 40</td>
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<td>United Kingdom – FTSE 100</td>
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**Note:** Daily data until 6 October 2006. Historic volatilities are monthly volatilities calculated from daily data. Implied volatility can be interpreted as market expectation of risk (future volatility) and is derived from at-the-money call option prices (interpolated) using the Black-Scholes formula. The Cox-Rubinstein binomial method is used for American style options.

**Source:** Thomson Financial Datastream.
Nonetheless, since the May-June correction, equity markets have resumed their upward path and many major equity price indices have regained levels attained before the downturn. Such developments have been supported by positive earnings reports and a favourable growth outlook for the euro area and Japan as well as a drop in oil prices, which relieved some concerns among market participants about upward pressure on inflation. In the course of the oil price decline, inflation expectations, as measured by the difference in yields of nominal and inflation-indexed bonds, fell back (Figure 3). On the basis of the improving output-inflation trade-off, some market participants adopted the view that the Fed would be more at liberty to support an expected slowing US economy. In Europe, the recent rise of the ECB’s policy rate early in October was viewed favourably, supporting a jump in share prices to five-year highs. Financial markets shrugged off the recent increases in oil prices early in October, following OPEC’s announcement of possible cuts in production, but it cannot be excluded that risks of higher and volatile oil prices remain.

**Figure 3. Implied inflation expectations and crude oil price**

Note: Daily data until 6 October 2006. Implied inflation expectations (“breakeven inflation”) are differences in yields between 10-year government benchmark bonds and inflation indexed bonds (Merrill Lynch government inflation-linked bond indices).

Source: Thomson Financial Datastream.
...with little evidence of overvaluation, as fundamentals have remained broadly unchanged.

Looking at price-earnings (P/E) ratios of major indices, there is little indication that share prices are overvalued (Table 1). The P/E ratios of all G7 broad stock market indices and those of almost all sectoral indices are below their long-term averages (measured from the beginning of 1990 to date), despite the strong growth of some major indices. For example, most of the
European indices have grown over 10 per cent over the year to date. This corroborates the temporary nature of the May-June correction on equity markets and the positive investors’ sentiment thereafter which put share prices back on a growth track.

Financial sector indices outpaced the broader market in all G7 economies except in Japan, where the negative performance of banks dragged the financial index down. Despite the positive performance of the insurance sector since the beginning of the year, over the past six months also this sector also showed a negative performance (Figure 4). Facing rising refinancing costs and often locked in at low long-term returns, many Japanese banks are bearing the costs of adjustment to the Bank of Japan’s new regime. By contrast, euro area bank have been the best performers over the year to date, as reflected in a rise in the euro area banking index of almost 20 per cent (Table 1). However, more recently, as measured over the past six months, the US banking index outpaced its G7 peers with a gain of almost 10 per cent growth. However, flattening yield curves and a cooling housing market may put more pressure in on banks in particular in the US, where they have also taken on sizable exposures to the household sector by issuing more non-traditional mortgage instruments and extending loans to sub-par borrowers.
After a difficult previous last year the US insurance sector has fared much better.

Hedge funds performed well during the equity market decline.

The US insurance sector, which had suffered from the hurricane season last year (and the New Orleans disaster in particular), seems to have come out well through this year’s more benign heavy weather season, improving their balance sheets through higher insurance charges, which reflect the previous heavy damages, and also due to the fact that more homes are being built along the coastal danger zones which require higher insurance.

The run on hedge funds which was particularly strong last year has been slowing, but hedge funds continue to be popular investments. They have weathered the storm of stock market declines in May and June by benefiting from heightened volatility, and thus outperformed other investments during that period (Figure 5). Also, market observers

Figure 5. Relative performance of US securities and hedge funds
Returns relative to broad market (DS total market index 2004 = 100)

Note: October 2006 data are based on averages until 6 October.
Source: Thomson Financial Datastream.
reported that there were no signs of crowded trades during the downturn and they were also relaxed about the risk that hedge funds might need to sell into a falling market in the event that margins calls could urge them to raise collateral for risky investments. Hedge funds’ performance was less favourable more recently, and correlation with equity market indices declined as stock market volatility eased.

III. Bond markets and interest rates

Bond markets have been driven by uncertainties over the economic outlook and expectations regarding the reaction of major central banks to inflationary pressures. The upward trend of major benchmark bond yields which had started early this year was halted by developments around the equity market correction in May and early June (Figure 6). The equity market sell-off led to bidding up of bond prices as investors looked for safer assets. As a consequence, in the course of a month, from around mid-May to mid-June, major benchmark bond yields dropped around

Figure 6. 10-year government benchmark bond yields

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<tr>
<th>United States</th>
<th>Euro area</th>
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Note: Data are of 6 October 2006.
Source: Thomson Financial Datastream.
20 basis points. Bond market volatility has remained low overall. While volatility dropped slightly for US and euro area benchmark bond returns, it increased for the Japanese benchmark yield.

Much of the uncertainty over the outlook for growth and inflation that affected the long end of the yield curve was driven by the uncertainties concerning the impact of a cooling US housing market, which some expected to pull down consumer spending and weigh on the US economic outlook. At the same time, inflationary pressures have been building up as previous oil price increases have been creeping into core inflation. As well, there are some arguments that an inverse relationship between house prices and rents could put upward pressure on the CPI through rental costs if house prices fall or increase more slowly. But, empirical evidence on such an effect is not conclusive. Rather, it seems that at times there has been a lagged positive relationship between house prices and the CPI, implying that a cooling housing market would have dampening effects on consumer price inflation and, in that event, on long-term interest rates.

For both the US and the Euro area, a bullish bond market sentiment has driven down expectations on long-term bond yields over the past few months (Figure 7). December futures for 10-year US Treasuries declined about 50 basis points over the past four months, and a decline of similar magnitude has been observed for Euro Bund futures. These movements are in line with downward revisions to growth and lower inflation expectations stemming from lower oil prices, but perhaps also to beliefs that central banks’ would remain vigilant regarding inflation.

In fact, as central banks around the globe continued to withdraw liquidity (Figure 8), yield curves generally have flattened (Figure 9). In the US, while the Fed, after its last quarter point increase at the end of June, which lifted the Fund rate target to 5.25 per cent, had given indications of a pause in future tightening moves, the ECB after its rise of the repo rate to 3.25 per cent early in October, raised speculation as to a further upward move in December. Expectations on US short-term interest rates, as implied by forward rates and future contracts,
point to some monetary easing by the Fed next year (Figure 10). Conversely, judged by the same measures, investors expect some further tightening by the ECB by the end of this year. For next year, expectations are basically flat for euro area short-term interest rates. In Japan, where the BOJ ended its monetary easing policy in May, expectations regarding interest rates are more volatile. While expectations on future short term interest rate moves have been pointing upwards, they have dropped substantially over the past few months. In the United Kingdom, where the Bank of England increased its policy rate to 4.75 per cent early in August, there are no strong expectations as to future rate increases. In Canada, expectations for Canadian short-term interest rates point downwards for the next year, echoing sentiment in the United States. Such expectations would imply that, after the Bank of Canada had raised its call rate to 4.25 per cent at the end of May, tightening would have come to a halt for some time ahead.

Figure 7. Changes in interest rate expectations in major markets
Long-term interest rate futures, December 2006 contracts

Note: Daily as of 6 October 2006.
Source: Thomson Financial Datastream.
Credit markets reflected a positive sentiment...

Credit markets seemed to have continued to reflect a positive investors’ sentiment. In the wake of the equity market sell-off in the second half of May and early June, corporate spreads have risen somewhat both in the United States and the euro area. But spreads of investment-grade over benchmark bond yields are still hovering around their 5-year averages in the United States, and have remained below such averages in the euro area (Figure 11). High-yield spreads are well below their 5-year averages on both sides of the Atlantic, and investment-grade as well as high-yield spreads have eased somewhat more recently (Figure 12).
…but credit spreads, while still low, have edged up, suggesting some more risk aversion.

Investors have remained positive and apparently have not yet viewed the credit cycle as nearing a turning point. Default rates have been declining on a global level (Figure 13), and downgrade ratios have been low. However, looking ahead, default rates are forecast to slightly increase in the near future, and downgrade ratios have already been rising over the past two quarters in the United States as well as in Europe. Nonetheless, with more companies on the downgrade watch list than in 2005, many observers expect the credit quality to deteriorate further for US and euro area companies. In the United States, the risks are related to the expected cooling in the economy, and in Europe, the rising wave of mergers and acquisitions may overextend some borrowers’ capacities.
Figure 10. Implied forward and futures short-term interest rates

a) United States, euro area and Japan

Note: Data as of 6 October 2006. Actual rates: United States: 3-months eurodollar middle rate; euro area: Euribor 3 month offered rate; Japan: uncollater. 3-month middle rate; United Kingdom: Interbank 3-month offered rate; Canada: commercial paper 3-month middle rate; monthly averages. Implied forward rates are derived from zero-bond yield curves. Eurodollar futures: 3-month (CME); Euribor futures: 3-months (LIFFE); United Kingdom: 3-month sterling futures (LIFFE); Canada 90-day bank acceptance futures (ME).

Source: Thomson Financial Datastream.

b) United Kingdom and Canada
Figure 11. Investment-grade corporate bond spreads

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United States  | Euro area    | United States – 5-year average | Euro area – 5-year average

Note: Daily data until 6 October 2006. Aggregate 5-7 year corporate AA bond yields minus 5-7 government benchmark bond yields (Merrill Lynch indices) for the United States; and JP Morgan Maggie government spread of investment grade credit, all sectors, all maturities (5-6 yrs on average), for the euro area.

Source: Thomson Financial Datastream, OECD.

Figure 12. High-yield bond spreads

<table>
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United States  | Euro area    | United States – 5-year average | Euro area – 5-year average

Note: Daily data until 6 October 2006. Aggregate corporate high-yield bond yields minus aggregate corporate BAA bond yields (Lehman indices) for the United States; JP Morgan Maggie government spread of high yield credit, all sectors, all maturities, for the euro area.

Source: Thomson Financial Datastream.
IV. Foreign exchange markets

Changing growth and interest expectations have also been the driver for major exchange rates over the past few months. While adjustments to the high US current account deficit have put the US dollar under structural pressure and on a downward path against the euro and the Japanese yen, the May-June global equity market downturn temporarily brought and end to this trend (Figure 14). Since around mid-May the dollar started to fluctuate more widely against both the euro and the yen, and has recently moved sideways within a narrower band of variation.

In mid May, when the global equity market sell-off caused major drops of share prices around the world, the dollar was boosted by investors returning to the world’s reserve currency. The fact that during this period the dollar also made strong gains against selected high-yielding currencies, like the New Zealand dollar and the South African rand, after both countries unveiled sharply higher current account deficits, was an indication for some observers that the dollar had also been benefiting from an unwinding of carry trades, many of which had been established by US-based hedge funds. After that boost to the dollar, a posi-
In Japan, where the economy has only slowly been recovering from deflation, and where the growth outlook has recently been revised downwards, the yen has continued to lose strength against the euro. European and Japanese officials, around the time of the G-7 meeting in mid-September, indicated that they would prefer a stronger yen against the euro. While it lent some support for the currency, this “verbal intervention” has so far not been backed up by explicit policy actions. But as some observers noted, such an officially expressed disagreement with actual exchange rate developments may increase trading risk and, thus, encourage speculative sellers of the yen to give greater consideration to the possibility of sudden movements against their position. The greater risk of sudden reversals is thought to discourage carry trades which are said to have played an important role in the recent weakness of the yen.

The yen lost strength against the euro, little appreciated by European and Japanese leaders.
Capital inflows into the US have been supporting the current account deficit, ...

So far, any currency adjustments to global imbalances have been smooth, and despite a recent decline in June capital inflows into the US have been comfortably supporting the dollar in the face of an increasing current account deficit (Figure 15). With a total of over USD 855 billion over the 12 months ending in July, major foreign investments in US assets were mostly in US government bonds. Net inflows in equity increased in July, stemming somewhat against the outflow in bonds.

Figure 15. *Net portfolio flows into US by category*

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Figure 15: Net portfolio flows into US by category

- **Government bonds**
- **Corporate bonds**
- **Foreign bonds**
- **Equity, total**
- **Bonds, total**

Note: Net portfolio flows are net purchases of assets by foreigners from US residents (gross purchases - gross sales). Bonds comprise US and foreign bonds; government and corporate bonds as shown here are US bonds only; equity comprises US and foreign equity.

Source: Thomson Financial Datastream.

... with inflows from China increasing.

While Japan with a share of 30 per cent is still the major holder of US treasuries abroad, other countries in the Asian region are becoming more important in this respect. Inflows from China in particular, which is currently holding about 15 per cent of US treasuries abroad, have increased substantially over the past few years, outpacing the net inflows from Japan (Figure 16). Major net inflows are still attributed to the United Kingdom, although given London’s role as an international financial centre the origin of such flows is less
clear. There is some indication that these flows include substantial investments by oil exporters, who are investing the oil surpluses in US and other assets abroad.

V. Emerging markets

Emerging markets had been hit hard by the stock market downturn in May and June. After record inflows last year, these stock market turbulences triggered some of the biggest weekly outflows from emerging market funds in two years. The unwinding of trades by leveraged investors caused major emerging stock markets to tumble (Figure 17) and raised emerging market spreads to temporary highs (Figure 18). Among the regional equity indices shown, Latin American was hit hardest, declining over 35 per cent from its 10 May peak to a new low on 13 June. On a national level, the Indian stock market, which not so long ago profited from strong foreign investments, was hit even harder, losing almost 48 per cent over the same period, from a peak on 10 May to 13 June until. The Asian overall index (excluding Japan) declined almost 23 per cent from 8 May to 13 June.

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While these markets have not regained their early-May peaks, they have nevertheless recovered substantially. While some investors have not returned after the heavy sell-off, unchanged positive fundamentals have been supporting the markets so far. While corporate downgrade ratios have recently deteriorated slightly, in particular in Latin America, for emerging markets as a whole they remain well below US and European ratios. Moreover, in terms of volume, upgrades over the first three quarters of 2006 by far outweigh downgrades, which, largely owing to the negative US performance, is not the case for developed countries. Furthermore, sovereign bonds of emerging markets improved their credit quality overall, reporting eight upgrades and only two downgrades in the third quarter of 2006. Four of those upgrades took place in the Asia/Pacific region. The two downgrades, one in the Eastern Europe, Middle East and Africa region, were by far outweighed by upgrades in volume terms.
Positive fundamentals are also behind international investors’ increasing interest in holding emerging market securities denominated in the issuer’s own currency. Implicit in such developments are expectations of sustained economic and financial stability in emerging markets, outweighing risk considerations, and changing long-held views about structural weaknesses inherent in developing markets. So far, new market advances, improved financing terms and improved market access for emerging markets have contributed to a “virtuous circle” which should further boost economic progress.

Looking at the various regions, in Latin America the Brazilian Bovespa index has generally outperformed the overall Latin American equity index over the past few months. With a strong current account position Brazil has been able to accumulate reserves and has been moving towards an...
investment-grade rating. But growth has remained below its large emerging market peers. Given such developments, along with the still relatively high interest rates, some international investors have shifted their investments from equity toward fixed-income. Should growth resume at a higher pace and interest rates come down as widely expected, such a trend could be reversed.

...and in Asia, despite the recent difficulties,…

Investors have also stayed confident with respect to investments in Asia, despite the difficulties the region has been facing recently. In Indonesia, a country still under the spell of the bird flu and having been hit by a tsunami in July, the government announced early in October that it will repay early its remaining obligations to the International Monetary Fund. This positive record has been backed by the country’s strong economic recovery and its healthy balance of payments position. In Thailand the government had been overthrown by a military coup in September. While the baht slightly weakened on the event and stock markets and banks closed on the day of the coup, no longer-lasting negative effects became evident on the markets. The Philippines, where an ambitious plan to boost economic growth had been announced, successfully placed about USD 750 million in sovereign bonds at the end of July, despite the country’s high level of debt.

... and in China, where reforms continued,…

In China, the renminbi has appreciated substantially, continuing a rise which had already started in May. Important reforms are being undertaken to open up the Chinese economy and its financial markets, and these developments may have a bearing on exchange rate dynamics.5

... as well as in the MENA region, which offers profitable investment opportunities despite remaining security risks.

Following a decline in line with other EMBI spreads, the Middle East index spread increased substantially in the second quarter of this year, driven by investors’ fears over the continuing political instability in the region, in particular the on-going civil conflict in Iraq and the recent war in Lebanon. However, the Arabian markets share price index which had started to decline from speculatively high levels already in November last year, turned towards a recovery in July and its volatility has decreased, owing to a positive economic outlook for the Middle East and North Africa (MENA) region.
more generally. The strong economic performance is underpinned not only by high oil prices but also economic reforms. Liberalising investment regimes and modernising financial markets has been high on the agenda of many governments of MENA countries. The fact that privatisations, especially in the Gulf countries, have usually been significantly oversubscribed indicates that such reforms have been increasing profitable investment opportunities for foreign as well as local investors, thus taking advantage of the region’s wealth and local savings.
Notes

1. In the United States, housing items (including energy costs and furnishing) account for about 40 per cent in the consumer price index, with 23 per cent being attributed to imputed rents (“Owners’ equivalent rent of primary residence”) and only about 6 per cent to actual rents (“rent of primary residence”).

2. Standard and Poor’s, Global Fixed Income Research, Global Corporate and Sovereign Rating Actions: Third Quarter 2006.

3. Based on Standard and Poor’s, Global Fixed Income Research, Global Corporate and Sovereign Rating Actions: Third Quarter 2006.

4. See also A Virtuous Circle of Success in Sight, Commentary by John Lipsky in The Straits Times, Singapore, 18 September 2006.

5. See also the article on financial sector reforms in China in this issue of Financial Market Trends.