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1. Overview: repricing in credit markets

Credit and equity markets fell starting in March 2005 as investors retreated from investments with higher risks. Credit markets experienced their largest sell-off since 2002, while equity markets gave up most of their gains from 2004. At the same time, long-term yields in the major markets fell close to or even below their previous lows, pushed down in part by the flight to quality. Markets seemed to stabilise in mid-May, although it remained to be seen whether the turbulence in credit markets had truly passed.

Firm- or sector-specific news, particularly the troubles of US auto makers, played an important role in the retreat from riskier assets. So too did weak economic news, especially during April. In May, stronger than expected data releases helped equity markets to rebound. However, credit spreads continued to widen – and government yields to fall – through to mid-May in response to nervousness about possible downside risks. Unusual volatility in the default swap market added to uncertainty in May, although, in general, markets were orderly during the sell-off.

Despite the widening of credit spreads, financing conditions for many borrowers remained favourable. In fact, owing to the low level of nominal yields, borrowing costs stayed close to historical lows at longer maturities. Some new bond issues were postponed or cancelled, but better-quality borrowers had little trouble raising funds. Many emerging market borrowers were in this latter group; emerging market spreads widened by far less during the most recent sell-off compared to earlier repricing episodes.

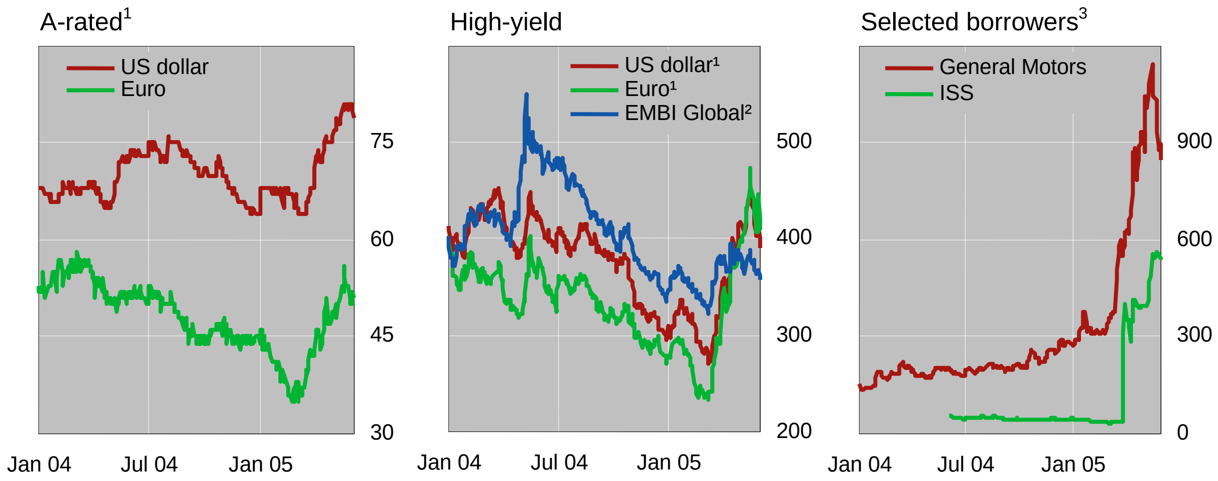
Credit spreads widen

Credit spreads widen starting in March …

After narrowing almost continuously since October 2002, corporate and emerging market spreads reversed direction in mid-March 2005 (Graph 1.1). From their low on 9 March, spreads on A-rated dollar-denominated corporate bond indices widened by almost 20 basis points to a peak of 81 basis points on 17 May. Spreads on high-yield corporate bond indices widened by 185 basis points to 457 basis points over the same period. Credit spreads seemed to stabilise in mid-May. Nevertheless, in early June it was still unclear whether the sell-off represented a significant turning point or only a temporary setback in the long downward trend in credit spreads.

Credit spreads

Daily, in basis points



[1] Option-adjusted spreads over government bond yields; Merrill Lynch corporate bond indices. [2] Sovereign stripped spread over government bond yields; JPMorgan Chase emerging market bond indices. [3] Credit default swap spreads.

Sources: JPMorgan Chase; Merrill Lynch; Mark-it. Graph 1.1

The widening in spreads between mid-March and mid-May was neither exceptionally abrupt nor especially detrimental to overall credit conditions. Credit spreads had widened by much more during previous episodes, for example following the Russian default in August 1998 and the collapse of WorldCom in mid-2002. Furthermore, even at their most recent peak, corporate and emerging market spreads traded close to their levels a year ago and still well below their 2002 and 2003 levels.

... especially investment grade spreads

Nevertheless, the sell-off was significant because it was broadly based. Whereas during the long rally in credit markets starting in October 2002 spreads on high-yield bonds had on occasion widened, spreads on investment grade bonds had rarely done so. Between mid-March and mid-May 2005, however, all borrowers regardless of credit quality saw their spreads widen. In fact, there was arguably a larger impact on investment grade credits than high-yield. Graph 1.2 illustrates the daily value-at-risk (VaR) for various credit indices at the 95% confidence level, calculated from actual excess returns over 100 days. In February 2005, there had been a 5% probability that daily losses for the investment grade corporate bond index would exceed 0.04%. During the sell-off, the VaR increased more than fourfold to 0.16% in mid-May. By contrast, the VaR for the high-yield corporate bond index only doubled, from 0.26% in February to 0.49% in May.

Catalysts

Profit warning from General Motors ...

The latest repricing in credit markets appears to have been set off by a series of adverse and unexpected developments in the corporate sector. The most important among these was a warning from General Motors on 16 March that its earnings in 2005 would be weaker than the company had previously forecast. The warning prompted the major rating agencies to revise their outlook for GM's credit rating to negative. This in turn heightened investors' concerns about the impact on credit markets of a downgrade to below investment grade of such a large borrower. Credit default swap (CDS) spreads on GM rose by about 90 basis points immediately following the warning, to 473 basis points on 16 March, and by another 400 basis points over the following month (Graph 1.1).

... accounting irregularities ...

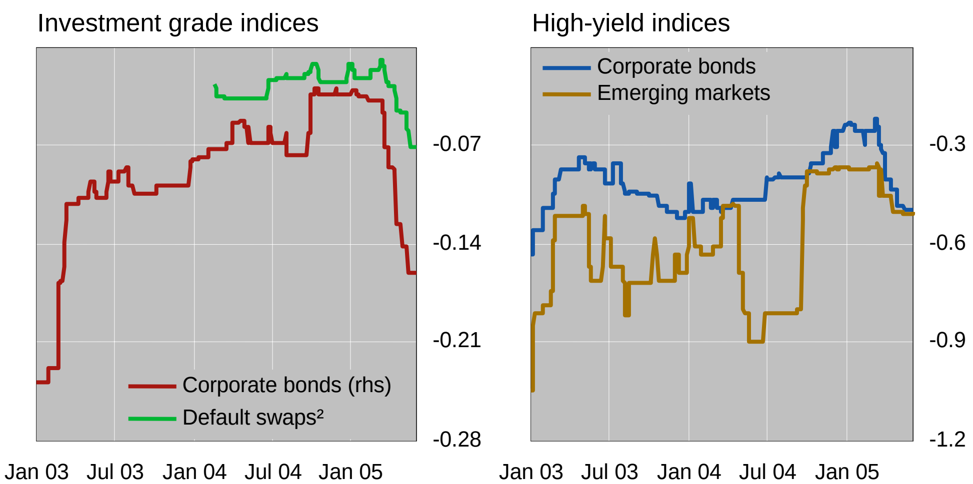
Accounting irregularities and related regulatory investigations added to investors' concerns. The acknowledgment by American International Group – the largest insurer in the world and (until recently) one of very few AAA-rated firms – of inaccuracies in its financial statements gave pause to investors. In late March, uncertainty about the extent of these inaccuracies caused AIG's default swap spreads to double and its rating to be downgraded. AIG was not alone in facing accounting problems. The number of firms which missed the US Securities and Exchange Commission's March deadline for filing annual financial statements increased markedly in 2005, with shortcomings in accounting practices and internal financial controls commonly cited reasons for the delay.

... and leveraged buyouts ...

Several capital restructuring actions also caught credit investors by surprise. In the early part of 2005, many firms announced plans to increase their dividend or to buy back their shares – in some cases with the express intention of releveraging their balance sheets – while other firms were the targets of leveraged buyouts. Such actions had been increasing in number since at least mid-2004. Nevertheless, the leveraged buyout of the Danish cleaning company ISS in late March was especially unsettling. It highlighted the slippage in creditors' insistence on covenants to protect their interests that had accompanied the narrowing of spreads over the past few years, in high-yield debt markets in particular. ISS's outstanding bonds did not contain a clause allowing bondholders to accelerate repayments in the event of a change in control. This effectively permitted the private equity investors bidding for the

Downside risk in credit markets

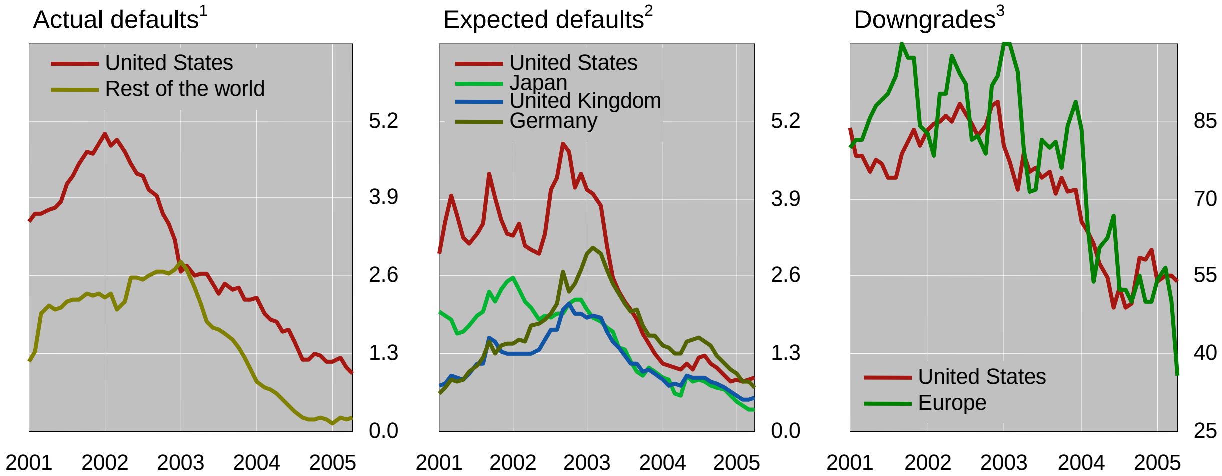
Value-at-risk for selected credit indices, in per cent[1]



[1] Based on daily excess returns over a 100-day rolling window; 95% confidence level; Lehman Brothers' US dollar indices. [2] Daily returns; equally weighted CDS index.

Sources: Lehman Brothers; BIS calculations. Graph 1.2

Corporate credit quality



[1] Defaulting companies as a percentage of all rated companies; 12-month trailing average. [2] Expected probability, in per cent, that a company will default within one year; median for non-financial corporations. [3] Downgrades of non-financial corporations as a percentage of all rating changes; three-month trailing average.

Sources: Moody's; Moody's KMV; BIS calculations. Graph 1.3

company to subordinate the existing bonds. Owing to the prospect of an increase in leverage, ISS's default swap spreads rose eightfold on the day the deal was announced, from 39 basis points to 315 basis points (Graph 1.1).

To be sure, these events were not necessarily perceived as indicative of underlying weaknesses in the corporate sector as a whole. Indeed, credit quality has improved significantly in recent years. Moreover, while there were signs that credit quality has peaked, most notably in the United States, it is not commonly expected to deteriorate over the near term. In the United States, downgrades kept close to their most recent low, although since late 2004 they have increased slightly as a percentage of all rating changes (Graph 1.3). Similarly, probabilities of default estimated from balance sheet information and equity price volatility stayed near their cyclical low. In Europe and Japan, upgrades continued to exceed downgrades and probabilities of default remained low.

Flight to quality

… trigger a repricing of risk

The strength of underlying conditions suggests that an increase in the price of risk, rather than in perceptions of risk, was responsible for much of the widening in credit spreads. Risk aversion had fallen to unusually low levels in late 2004 and early 2005, owing partly to investors' willingness to discount risks when seeking higher returns. General Motors' profit warning, ISS's buyout and similar events reminded investors of the downside risk inherent in credit instruments and prompted a repricing of risk. Disappointing economic news in March and April exacerbated the increase in risk aversion.

Downgrade of Ford and General Motors

While confidence began to return in the latter half of April, bolstered in part by earnings reports from GM and Ford that were in line with investors' expectations, it proved ephemeral. Credit spreads widened further in May on continuing concerns about event risk. Standard & Poor's downgrade on 5 May of GM, Ford and their finance subsidiaries to below investment grade added to investors' worries. Many market participants were surprised by both the timing and the size of the downgrades, with S&P downgrading GM by two notches to BB and Ford by one notch to BB+.

Conditions in corporate bond markets remained orderly following the downgrades. Indeed, in the days immediately after the announcement, A-rated corporate bond spreads were little changed. Credit derivatives markets were more unsettled than cash markets, however (see the box on page 6). Some hedge funds reportedly lost substantial amounts on trades involving General Motors and CDS index tranches. The possible systemic consequences if some of these highly leveraged players were to fail weighed on credit markets in the first half of May. Credit markets were also said to be pressured by hedge funds' moves towards more liquid positions, with some funds anticipating an increase in redemptions in response to their lacklustre returns in recent months.

Unclear whether the sell-off has run its course

A rally in equity markets helped stabilise credit markets starting in mid-May. Credit spreads reached their widest on 17 May, well after equity markets had begun to move upwards (see below). The North American CDS index then narrowed by a remarkable 16 basis points, to 62 basis points, over the next two days. Corporate bond spreads also tightened, albeit at a more subdued pace. Nevertheless, as of early June it remained unclear whether the sell-off in credit markets had run its course.

Emerging markets outperform

Emerging market spreads are not as adversely affected …

Emerging market spreads were not as much affected as corporate spreads over the period under review. They peaked earlier than corporate spreads, around 15 April during the flight to quality, and were not as volatile. Moreover, they were not as much affected as during the sell-off in 2004. Whereas in April and May 2004 the EMBI Global had widened by approximately 150 basis points, to a high of 549 basis points, in March and April 2005 the index widened by only 73 basis points, to a high of 395 basis points.

One reason emerging market spreads were less affected than corporate spreads was that the events that brought about repricing in credit markets – profit warnings, accounting problems and leveraged buyouts – had little relevance for sovereign debt markets. In addition, the strength of domestic conditions in emerging economies helped limit the reaction.

While emerging markets were not free from surprises, unlike in the corporate sector these surprises were not perceived to have broader consequences. Problems in Ecuador, for example, were regarded as unique to that country. Civil unrest led to the resignation of the president and increased uncertainty about the future course of economic policy. As a result, in the week beginning 18 April, spreads on Ecuador's sovereign dollar bonds widened by 150 basis points even as most other countries' sovereign spreads tightened. Also in April, the prospect that French voters might reject the proposed EU constitution, which in turn could complicate EU accession negotiations, put upward pressure on Turkish spreads. Delays in the finalisation of Argentina's debt restructuring did not prevent the government from tapping local bond markets in May for the first time since the default. In February, investors

Stress testing of credit markets: the downgrade of General Motors and Ford

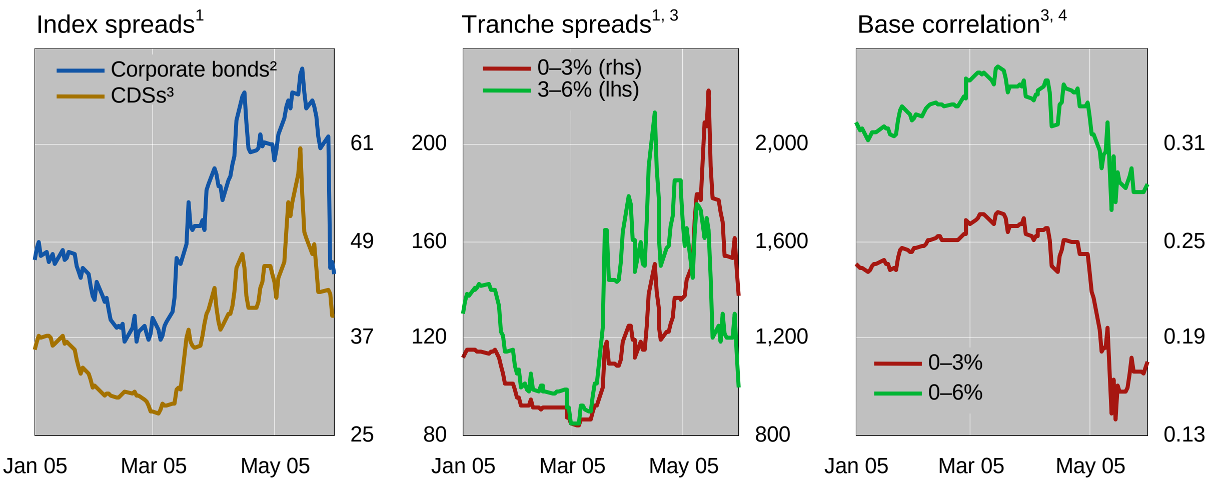
The downgrade by Standard & Poor's of Ford, General Motors and their finance subsidiaries to below investment grade tested the resilience of credit markets. Ford and GM are among the largest borrowers in the corporate bond market: together they accounted for approximately 3% of the investment grade bond market at the time of the downgrade and could eventually account for as much as 15% of the global high-yield bond market. Their debt was widely held and included in many collateralised debt obligations (CDOs). Consequently, the downgrade of the auto makers had the potential to cause dislocation in credit markets. In the event, cash markets appeared to adjust in an orderly way to the downgrade. Credit derivatives markets were more adversely affected, with CDS spreads "gapping" higher on several days in the first half of May and lower in the second half (left-hand panel of the graph below). Yet spillovers from credit derivatives markets to other markets were limited.

The adjustment of corporate bond markets to the downgrade of Ford and GM was facilitated by three factors. First, the downgrade had long been anticipated and so asset managers had ample opportunity to adjust their portfolios. Since mid-2003, the auto makers' spreads had been trading closer to those on speculative grade issuers than those on other BBB-rated issuers. Second, Ford is still rated investment grade by Moody's and Fitch, and GM by Moody's. Several of the largest bond index providers base their indices on the average of three ratings, and so Ford will remain in some investment grade indices despite S&P's downgrade. Last but not least, in recent years many fixed income managers have moved away from tracking market indices and towards customised benchmarks, for example by removing outliers from indices and imposing stricter exposure limits. There has also been a trend towards increasing the allowable tracking error. Such changes would tend to diminish the market impact of mechanical changes in indices.

Notwithstanding the orderly adjustment of cash markets, the downgrade appeared to have an adverse impact on the functioning of credit derivatives markets. It is easier to take positions – especially short positions – in credit derivatives markets than in corporate bond markets. Therefore, leveraged investors, such as hedge funds and investment banks' proprietary trading desks, tend to be more active in credit derivatives markets than in their cash counterpart. Leveraged investors play an important role in promoting market liquidity and improving price discovery. Yet at times their activities can exacerbate price movements. May 2005 seems to have been one such time.

The downgrade of Ford and GM caused relationships between the prices of certain assets to change in unexpected ways. Consequently, some "relative value arbitrage" trades – strategies in which approximately offsetting positions are taken in two securities that have similar but not identical characteristics and trade at different prices – suffered large mark to market losses. One

CDS markets



[1] In basis points. [2] Asset swap spread (over Libor); JPMorgan euro credit index for investment grade industrials; break in series on 1 June 2005 following the removal of Ford and GM from the index. [3] On-the-run five-year iTraxx Europe indices. [4] Default correlation implied by the price of a synthetic first loss tranche.

Sources: JPMorgan Chase; BIS calculations.

such trade was motivated by discrepancies between the price at which convertible bonds issued by GM were trading and the price of a replicating portfolio (consisting of regular bonds plus equity call options). Investors expecting this pricing discrepancy to narrow lost money on both legs of the trade: on 4 May GM's stock price increased by 18% after an offer from turnaround specialist Kirk Kerkorian to buy a large stake in the company, and then on 5 May the company's bond and CDS spreads increased after S&P's downgrade.

Another relative value trade on which investors reportedly lost money involved supposed anomalies in the pricing of CDO tranches. Spreads on the equity, ie first loss, tranche of CDOs tend to be much higher than the cost of a (delta) hedged position in the underlying CDO (or alternatively in the mezzanine tranche, which absorbs losses in excess of 3% of the notional amount and up to 10%). In early 2005, an investor who sold protection on the equity tranche of the iTraxx Europe CDS index and then hedged against market-wide changes in credit spreads by buying protection on the underlying index would have earned a spread of 300 to 400 basis points. Such a trade is exposed to changes in default correlation and so is commonly referred to as a long correlation position. Investors expecting default correlations to remain stable or increase were surprised in May when they instead fell sharply (right-hand panel of the graph). Starting in mid-April, investors appeared to have become increasingly concerned about idiosyncratic risks. This led to a widening of the spread on equity tranches and losses on long correlation positions (centre panel). The widening accelerated following S&P's downgrade of GM and Ford. Some correlation traders apparently sought to limit their losses by unwinding their positions. This temporarily put downward pressure on the spread of mezzanine tranches and thus exacerbated mark to market losses. Whereas normally changes in the spread of the mezzanine tranche are positively correlated with changes in the index, at times in early May the two moved in opposite directions.

As losses on such relative value arbitrage trades accumulated, investors rebalanced their portfolios to adjust their hedges, meet margin calls and reduce their risk exposure. This in turn caused liquidity to deteriorate, especially in CDS index and tranche markets. Many leveraged investors had similar positions, and this concentration of activity magnified the deleveraging process. The circle of deterioration was similar in nature, albeit certainly not in magnitude, to what had occurred in 1998, following the default by Russia and near collapse of Long-Term Capital Management.[①] However, whereas in 1998 volatility had swiftly spread from one financial market to another, in May 2005 events in credit derivatives markets had only a limited impact on other markets. The perceived strength of underlying economic conditions helped limit contagion. So too did improvements in risk management after the 1998 crisis. In particular, hedge funds today appear to be significantly less leveraged than in 1998.[②] As of early June, there was little evidence of any counterparties experiencing severe financing difficulties as a result of losses following S&P's downgrade of the carmakers.

① See Committee on the Global Financial System, *A review of financial market events in autumn 1998*, BIS, October 1999. ② See P McGuire, E Remolona and K Tsatsaronis, "Time-varying exposures and leverage in hedge funds", *BIS Quarterly Review*, March 2005, pp 59–72.

holding 76% of the defaulted debt had opted to accept the government's offer, but legal challenges stalled the planned exchange until early June.

... but are sensitive to changing macroeconomic conditions

Compared to corporate spreads, macroeconomic conditions made a more important contribution than event risk to the repricing of emerging market spreads. Continuing the pattern evident since at least early 2004, emerging market spreads exhibited greater sensitivity than corporate spreads to changing expectations regarding the course of US monetary policy. For example, after 10-year Treasury yields had risen by 15 basis points on 9 March, emerging market spreads widened by 6 basis points while investment grade corporate spreads were unchanged. Again on 22 March, a jump in yields induced an increase in emerging market spreads but little reaction in corporate bond markets.

The increase in risk aversion led many emerging market borrowers to postpone their borrowing plans. The decision to do so was made easier by the fact that many had prefinanced in the first quarter of 2005, when financing conditions had been exceptionally favourable. Emerging market borrowers had raised approximately $70 billion in international bond and loan markets in the first quarter of 2005, up 13% from the same period a year earlier (see "The international debt securities market" on page 31). Issuance slowed in April and May but was in line with 2004 levels.

Long-term rates resume their downward trend

Wider spreads are offset by lower yields

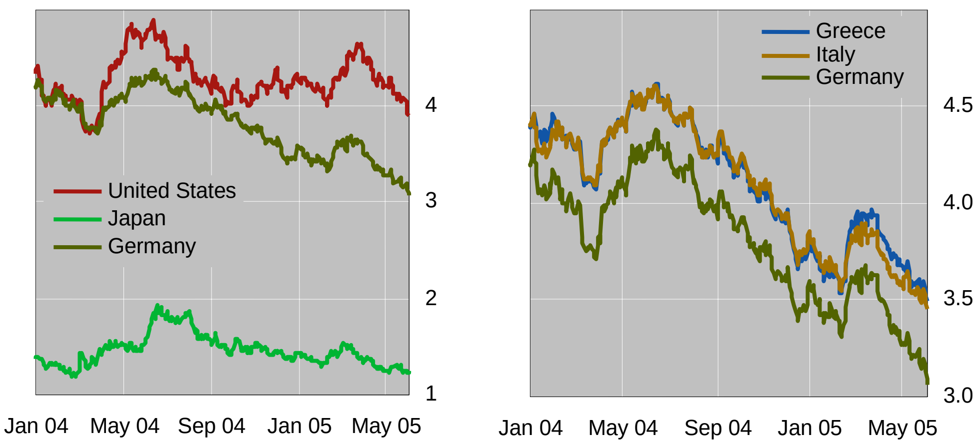
Despite the widening of credit spreads, many corporate and emerging market borrowers saw their financing costs remain unchanged or even decline owing to a fall in nominal yields. Following a brief increase in February, long-term yields in the major markets resumed their downward trend in late March (Graph 1.4). From their peak on 22 March, 10-year US Treasury yields decreased by 60 basis points to nearly 4.0% on 24 May – below the low levels which had posed a "conundrum" a few months earlier to the Federal Reserve Chairman (Graph 1.5). Over the same period, 10-year bund yields fell by 40 basis points to 3.3%, their lowest level since European monetary union.

Yields decline on disappointing data releases ...

Dollar yields declined in no small part due to disappointing macroeconomic data. In fact, the 8 basis point rise in the 10-year yield following the Federal Reserve's renewed emphasis on a pickup of inflationary pressures in its statement of 22 March marked the peak in long-term interest rates over the period. Subsequently, soft macroeconomic data released in late March and April weighed considerably on yields (Graph 1.6). For instance, poor consumer confidence data released in mid-April and a surprisingly below par GDP report announced a few weeks later contributed to outsized declines in yields. This was despite the continuation of Fed rate hikes over the period, as

Ten-year government yields

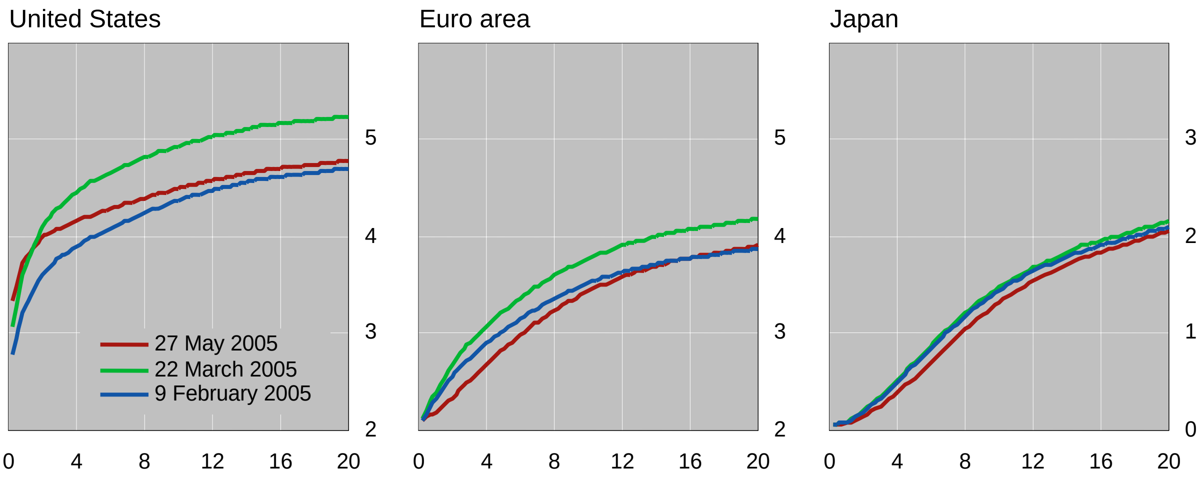
In per cent



Sources: Bloomberg; national data. Graph 1.4

Swap yield curves

In per cent



Note: For three-month US dollar and yen maturities, Libor; for three-month euro maturities, euro deposit rates; for all other maturities, annual swap yields at the close of trading in London.

Sources: Bloomberg; ICAP; BIS calculations. Graph 1.5

well as repeated indication by US policymakers of their anticipation of further "measured" rate increases.

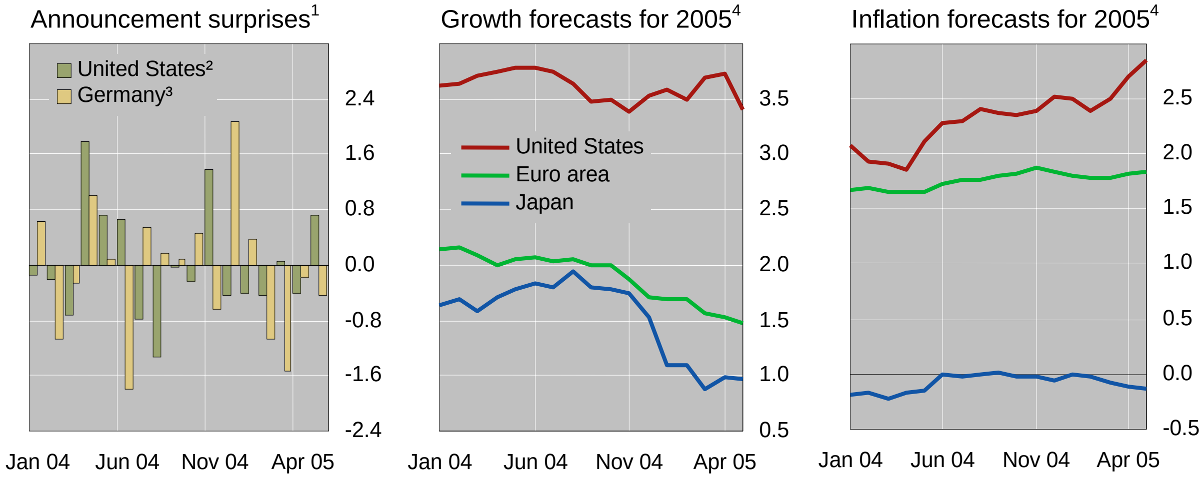
... and safe haven demand

Disappointing macroeconomic data were not the only sources of the fall in US yields, though; there was also evidence of safe haven demand for Treasuries, stemming from the increase in risk aversion and sell-off in credit markets discussed above. Macroeconomic news in the United States took on a more favourable tone in May, starting with the positive job report announced on 6 May, but yields remained contained. On 10 May, speculation of hedge fund losses and declining bank shares were reported to have boosted demand for Treasuries, and benchmark yields fell significantly. A few days later, while stronger than expected April retail sales led to some initial selling pressure in Treasuries, a sharp sell-off in equities and reports of funds shifting into government securities resulted in yields declining for the day by another 3 basis points. And though the US Treasury's announcement in May that it was considering reissuing the 30-year note after a five-year hiatus resulted in a marked sell-off in the longest-dated Treasury bonds, the yields on the benchmark 10-years rose only slightly.

Bund yields fall to record lows

In the euro area, disappointments in the macro data were even more persistent, and bund yields hit new all-time lows over the period. The spreads between the US and euro area 10-year yields widened from about 80 basis points in the first quarter to 90 basis points more recently. The key IFO index of business sentiment fell in a downward surprise to the lowest value in more than a year on 25 April, which coincided with a 4 basis point decline in bund yields. This and other weak euro area macro data up to May led many analysts to push back their expectation of ECB rate hikes. As is often the case, bunds were also sensitive to macroeconomic news emanating from the United States. For instance, in response to the poor US GDP report on 28 April, bund yields fell a few basis points.

Macroeconomic news



[1] Difference between actual data and consensus forecasts normalised by the standard deviation of past surprises; observations are positioned in the month in which the actual data were released. [2] Weighted average of normalised surprises of the ISM survey, non-farm payrolls, retail sales and producer price and consumer price announcements. [3] Survey of the business climate in Germany compiled by the Institut für Wirtschaftsforschung (Ifo). [4] Forecasts as 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. Graph 1.6

Increasing differentials among euro area government yields were also evident in the period under review, as investors became more sensitive to countries' fiscal difficulties. Italy and Greece saw their spreads over bunds gradually widen on scepticism about their ability to meet budget targets (Graph 1.4). There were also reports of safe haven demand for both bunds and Swiss franc bonds over the period, as carry trades on bonds of EU countries anticipated to enter the currency union were unwound in a general retreat from such speculative positions.

Yen yields move with equity markets

In Japan, though yields also declined during the period, the size of the contraction was much less than that seen in the euro area or the United States. The bond market seemed to take its cue more from falling share prices than from signals of a stagnant macroeconomic environment. Admittedly, the Bank of Japan Policy Board's downward revision of the outlook for CPI, announced on 28 April, consistent with the trend of consensus forecasts (Graph 1.6), did lead to a modest decline in yields of a few basis points. However, much worse than expected industrial production figures released on 30 March, as well as poor expected business conditions announced in the March *Tankan*, had a negligible impact on yields. Rather, relatively large one-day declines in 10-year bond yields over the period, of 3 and 4 basis points, on 15 and 18 April, occurred during the two sharpest one-day falls in share prices. Another factor weighing on yields in late May was the announcement of an extension in duration for a major bond index, which reportedly increased the demand for long-maturity bonds by pension funds.

Equity markets decline on reduced risk appetite

Share indices are weak in March and April ...

Equity markets were patchy from early March to May (Graph 1.7). Major equity indices tumbled in March and April following a decline in risk appetite and weak macro data releases. Despite a rebound in May for a number of major indices, the S&P 500, DJ EURO STOXX and Nikkei 225 lost 2%, 1% and 6%, respectively, from 7 March to 27 May, with both the US and Japanese indices close to or below the levels at which they had begun the new year.

Partly in parallel with the sell-off in credit markets, volatility rose sharply in mid-April in all major equity markets. Both implied and historical volatilities, which had fallen by early 2005 to their lowest levels in nearly 10 years, appeared to break out of the long-term downtrend, though they declined somewhat in May, and were still well below the levels of 2002 (Graph 1.8, left-hand panel).

... as investors turn risk-averse ...

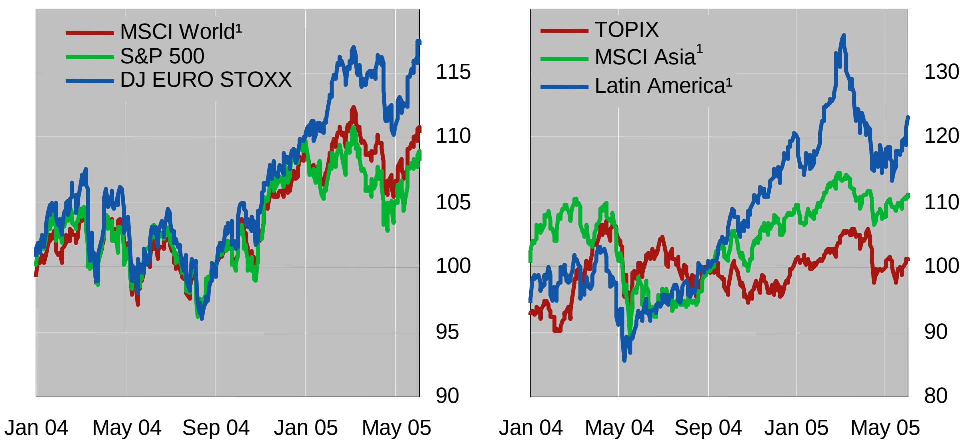
In addition to having higher expectations of risk, investors in equity markets turned more risk-averse. Our measure of risk appetite, derived both for different markets and globally from the pricing of equity index options and historical volatilities, is meant to capture the difference between the expectation of risk in equity markets and its price. After being range-bound at historically high levels, risk appetite has declined markedly in Germany, the United States and the United Kingdom since the beginning of the year. A summary measure of risk appetite across these markets had by mid-May dropped to levels that had last been observed in mid-2004 (Graph 1.8, centre and right-hand panels).

... and the economy disappoints ...

Uninspiring news on the macroeconomic front was clearly part of the reason for the weakness in US indices up to April. In March, investors appeared to focus on inflation concerns and a potential need for higher policy rates to counter them; and stock indices fell sharply after disappointing producer and consumer price reports as well as the FOMC statement on 22 March pointing to increased inflationary pressures. In April, attention shifted to a possible slowdown in demand, with share prices again falling significantly

Equity prices

In local currency; 1 September 2004 = 100

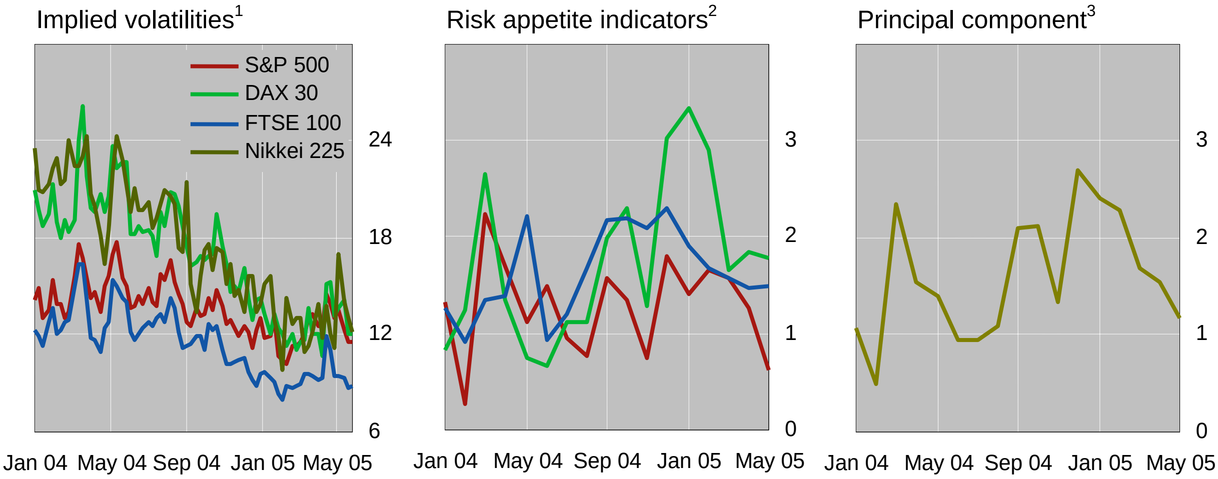


[1] Morgan Stanley Capital International equity index; for MSCI Asia, excluding Japan.

Sources: Bloomberg; Datastream.

Graph 1.7

Volatility and risk appetite in equity markets



[1] Price volatility implied by the price of at-the-money call option contracts on stock market indices; weekly averages. [2] Derived from the differences between two distributions of returns, one implied by option prices, the other based on actual returns estimated from historical data. [3] 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 1.8

amidst mediocre retail sales figures announced on 13 April and poor consumer confidence and manufacturer confidence numbers released on 15 April.

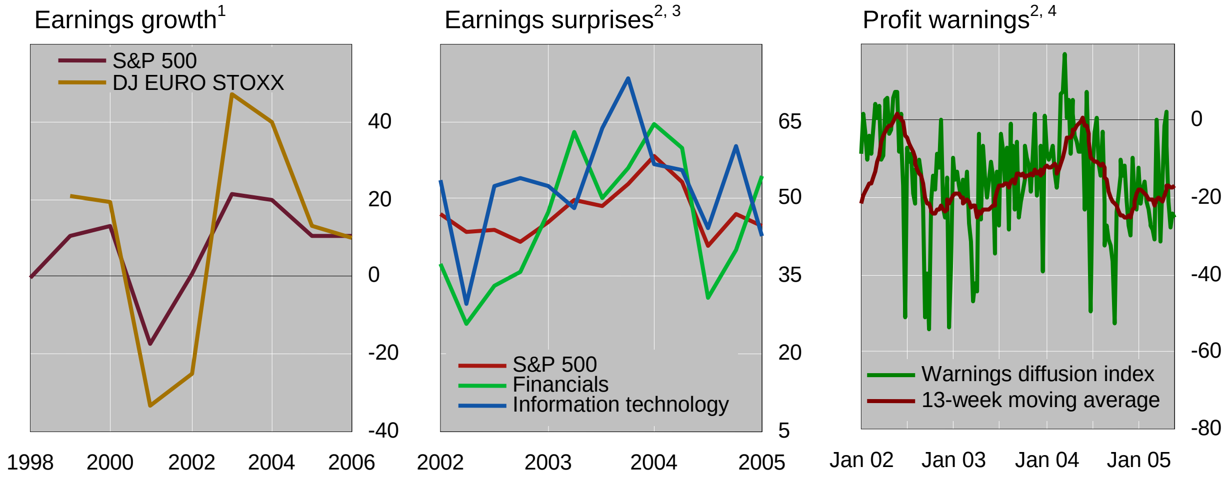
Equity markets in the United States suffered during the period despite earnings announcements that were, on balance, better than expected. Granted, a disappointing earnings announcement from IBM was cited as contributing to the 2% decline in major market indices on 15 April. However, other market bellwethers such as Citigroup and General Electric posted better than expected earnings that day. In aggregate, the ratio of positive to negative earnings surprises for S&P 500 companies, which had risen slightly in the last quarter of 2004, has remained stable in 2005. The trend in profit warnings has also been positive (Graph 1.9, right-hand panel). Eventually, the accumulation of positive earnings announcements, along with renewed M&A activity and improved macroeconomic news – in particular, a restrained core inflation announcement on 18 May – contributed to a marked rebound in the major indices in May.

European equity indices followed a similar general pattern to US indices, with a sharp fall in March and April followed by a May rebound. Unlike in the United States, though, the macroeconomic news flow in Europe remained grim; nevertheless, the German stock market gained notably on expectations that structural reform policies might be strengthened following the announcement on 22 May of early German elections. In addition, increased merger and acquisition activity in the euro area provided an impetus towards higher valuations.

... while Japanese stocks suffer on tensions with China

Japanese equities also saw a very sharp sell-off in mid-April, but for a somewhat different set of reasons. Admittedly, the context was one of continuing macroeconomic disappointment: for instance, a poor household spending report was followed by a plunge in major share indices on 29 March. However, rising political tensions with China greatly contributed to deteriorating sentiment, culminating in a 3.8% drop in the Nikkei 225 index on 18 April, the

Corporate earnings



[1] Annual percentage change of weighted average operating earnings per share; for 2004, estimate; for 2005–06, forecast. [2] Companies included in the S&P 500 Index. [3] 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. [4] 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 1.9

largest one-day decrease since 10 May 2004. This capped a string of six consecutive daily declines for a cumulative fall of more than 8%. Indeed, over this period the share prices of Japanese manufacturers and exporters of heavy industry that rely on sales to China contracted disproportionately. Major Japanese share indices then sat out the May rebound of other developed markets, in part because of the absence of the type of positive restructuring news that characterised these other regions.