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1. Overview: waning confidence in strong recovery

The early months of 2002 saw a waning of the anticipation of a strong recovery that had built up in financial markets during the fourth quarter. Reflecting more circumspection, stock prices declined and US long-term interest rates edged lower. Unexpectedly strong macroeconomic growth data in late February and early March led to another burst of optimism, but this too ebbed as subsequent data failed to support buoyed expectations. Rising oil prices raised the spectre of inflation in Europe and led to a rise in euro long rates. In equity markets, investors' hopes were dashed by a lack of evidence that corporate earnings were recovering in line with the economy as a whole. Share prices were depressed further by continued scepticism about corporate disclosure and accounting practices, by new reports indicating that stock analysts tended to be biased in their recommendations, and by a sudden aversion to companies seen as relying heavily on short-term debt.

The corporate bond market continued to be hospitable to most borrowers while non-financial firms came under increased pressure to reduce their reliance on short-term funding. Reluctance on the part of banks to provide backup facilities forced some firms out of the commercial paper market, while other firms tried to please their shareholders and rating agencies by reducing their use of short-term debt. Some large European firms tested the bond market for the first time as they sought alternatives to traditional bank financing. Corporate bond markets accommodated the shift by non-financial firms to longer-term funding. In a market with relatively weak net issuance, corporate spreads remained relatively narrow in the first few months of 2002.

Emerging markets benefited from the expectations of a recovery in the advanced economies. In spite of continuing economic problems in Argentina, sovereign spreads in general narrowed in an environment of low international interest rates. Still, few emerging market borrowers took advantage of the improved credit conditions. Among the best performing stock markets globally were those of Mexico, Korea and Southeast Asian countries, which were seen as having the most to gain from an economic rebound in the United States.

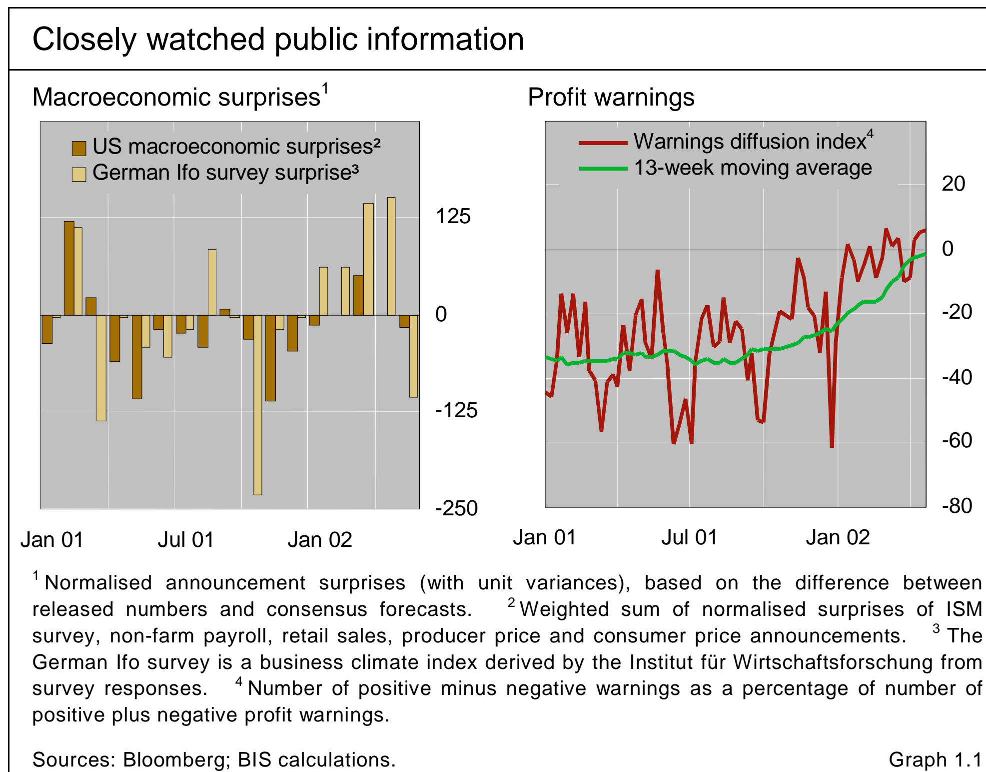
European long-term yields edge up on inflation concerns

Long rates fall in the United States but rise in the euro area

The high hopes for a strong recovery, which were evident in fixed income markets in the fourth quarter of 2001, gave way to more modest expectations in the early months of 2002. While the traditionally most closely watched macroeconomic indicators tended to be more positive than in the fourth quarter of 2001 (Graph 1.1), market participants were apparently still disappointed. They seemed to focus their attention on such indicators as durable goods orders in the United States, business and consumer confidence in the euro area, and German GDP growth, which tended to fall below market expectations. Slight reflationary pressures kept long-term interest rates from falling further, and in Europe actually led to rising rates. On balance, by mid-May five-year US dollar swap rates had fallen 15 basis points from their late December highs, while euro swap rates of the same maturity had risen 25 basis points over that period (Graph 1.2).

Greenspan testimony signals stronger growth

Surprisingly strong macroeconomic data in late February and early March led to a brief bout of optimism and, for a while, sharply higher interest rates. Market participants appeared to be especially surprised by the large upward revision in US fourth quarter GDP, released on 28 February, showing growth of 1.4% at an annual rate. Federal Reserve Chairman Greenspan's Senate testimony on 7 March, in which he gave a much more upbeat assessment of US economic prospects than he had in testimony just a week earlier, had an even more pronounced impact on long-term rates. On that day alone, major currency swap curves shifted markedly higher; the five-year US dollar rate rose 20 basis points and the euro rate 8 basis points. Market participants increased their expectations for both long-term economic growth rates and near-term



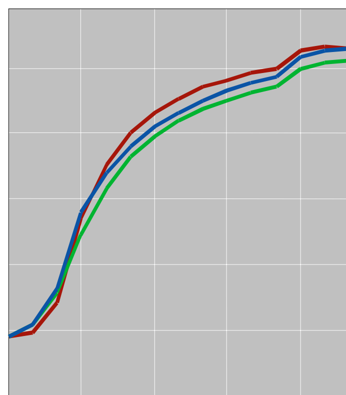
Closely watched public information

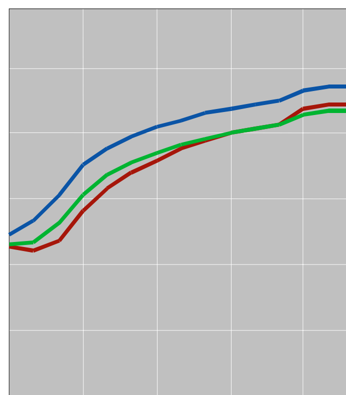
[1] Normalised announcement surprises (with unit variances), based on the difference between released numbers and consensus forecasts. [2] Weighted sum of normalised surprises of ISM survey, non-farm payroll, retail sales, producer price and consumer price announcements. [3] The German Ifo survey is a business climate index derived by the Institut für Wirtschaftsforschung from survey responses. [4] Number of positive minus negative warnings as a percentage of number of positive plus negative profit warnings.

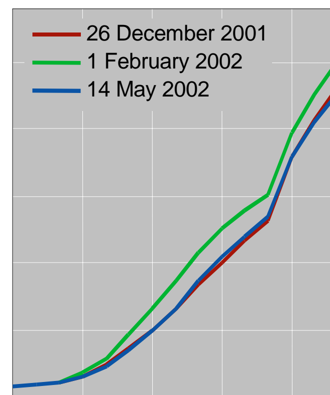
Sources: Bloomberg; BIS calculations. Graph 1.1

Yield curves for interest rate swaps

In percentages







Source: Bloomberg.

Graph 1.2

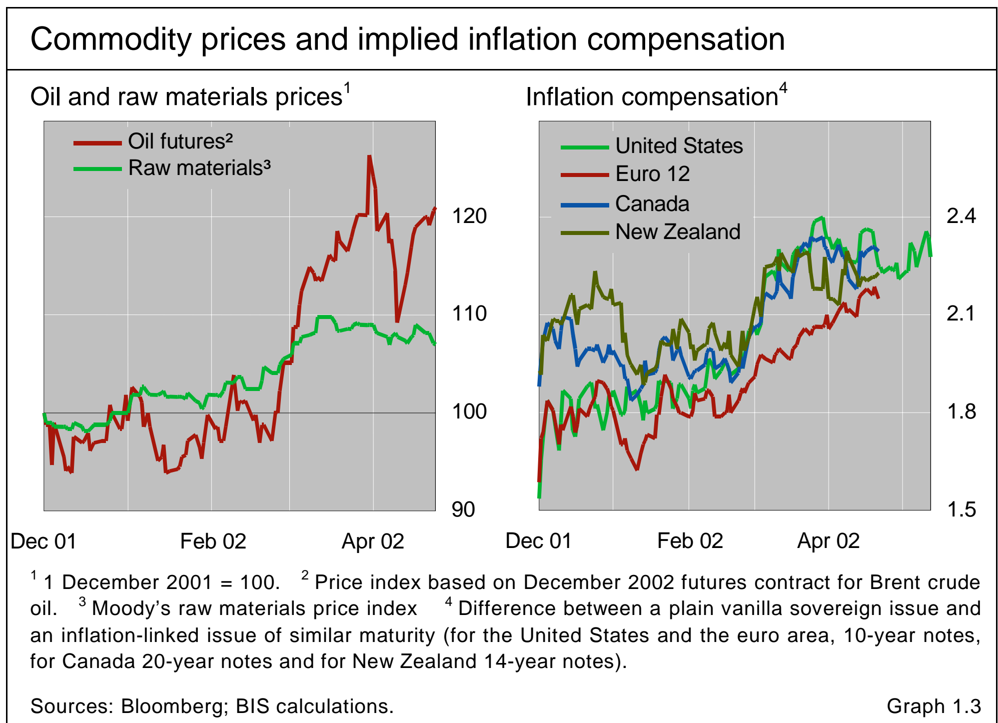
monetary tightening. From 27 February to 25 March, when policy rate expectations implied by interest rate futures peaked, swap curves both flattened and moved higher. The shift in investors' expectations about policy rates pushed up two-year swap rates by 82 basis points in dollars and 43 basis points in euros, while the respective 10-year swap rates climbed 55 and 27 basis points.

March and April also witnessed the removal of residual expectations of disinflation from long rates. Although markets apparently had difficulty predicting the strength of the economic recovery, they appeared convinced that the disinflationary pressures of the economic slowdown had passed. Rising oil prices also suggested increasing price pressure. A jump in 10-year swap rates in March coincided not only with the surprising strength of macroeconomic indicators but also with soaring oil prices (Graph 1.3, left-hand panel). While the anticipation of increased global demand for energy pushed commodity prices higher, the rise in crude oil prices and their volatility corresponded with increasing political disturbances in the Middle East and in Venezuela.

As bond investors watch German wage negotiations ...

Market participants viewed Europe as being particularly exposed to inflationary pressures. European reliance on imported oil and commodities was one factor, but concern over labour costs was another. Germany's powerful IG Metall labour union staged a strike in early May and market participants and European policymakers alike worried about the final outcome of their wage negotiations. Significantly, at the 2 May press conference, European Central Bank President Duisenberg said that while he still expected European inflation to be close to 2%, he could no longer confidently predict that it would be below that level.

The rising inflation component of long-term interest rates is evident in the behaviour of yields on inflation-linked government securities. Implied inflation



Commodity prices and implied inflation compensation

[1] 1 December 2001 = 100. [2] Price index based on December 2002 futures contract for Brent crude oil. [3] Moody's raw materials price index [4] Difference between a plain vanilla sovereign issue and an inflation-linked issue of similar maturity (for the United States and the euro area, 10-year notes, for Canada 20-year notes and for New Zealand 14-year notes).

Sources: Bloomberg; BIS calculations. Graph 1.3

... inflation compensation in French bonds increases

compensation, the difference between the yield of a plain vanilla sovereign issue and that of an inflation-linked issue of similar maturity, began to increase in late February as yields on nominal issues rose faster than the "real" yields on inflation-protected notes (Graph 1.3, right-hand panel). While differing tax treatment and thin trading tend to make the *levels* of yields on such inflation-indexed notes poor measures of real interest rates, significant *changes* in their yields are often informative about expectations. In March, much of the rise in inflation compensation paralleled the hike in oil prices. The French inflation-linked bond is indexed to inflation in the 12 countries of the euro zone. The implied compensation for this bond increased by 15 basis points in March. It is also worth noting that implied compensation in Canada and New Zealand did not fall after those countries' central banks proactively raised policy rates in March and April; in fact, Canadian inflation compensation continued to rise.

In Japan, long rates fall as fears over the budget deficit recede

Japanese interest rates were also unusually volatile throughout the first four months of the year and appeared to move to a different beat than those in other industrial countries. From late December to early February, while US dollar and euro interest rates were falling, Japanese 10-year swap rates rose more than 20 basis points. Discouraging macroeconomic data and little progress in the resolution of Japanese banks' bad assets seem to have raised expectations of future government borrowing needs and increased selling pressure on Japanese government bonds in early 2002. In late February and early March, however, yen interest rates began to fall, nearly returning to their December lows by early April. The decline in rates coincided with a rally in Japanese share prices and an appreciation of the yen. At the end of February, the Bank of Japan announced that it would increase purchases of Japanese government bonds by 25%; two weeks later the Ministry of Health, Labour and

Welfare signalled its intention to increase purchases of domestic sovereign debt.

Corporate borrowers come under pressure to go long-term

Investors, banks and rating agencies exert pressure

Non-financial corporate borrowers faced increased pressures to shift from short-term to long-term debt. The pressures came from shareholders of large firms, from investors in the commercial paper (CP) market, from banks providing CP backup facilities and from credit rating agencies. Even borrowers that had managed to maintain high credit ratings felt the pressure to "term out." Some of those forced out of the CP market turned to the corporate bond market, where long-term borrowing costs remained relatively attractive (Graph 1.4). In Europe, several large firms that had traditionally relied on short-term bank loans also turned to the corporate bond market.

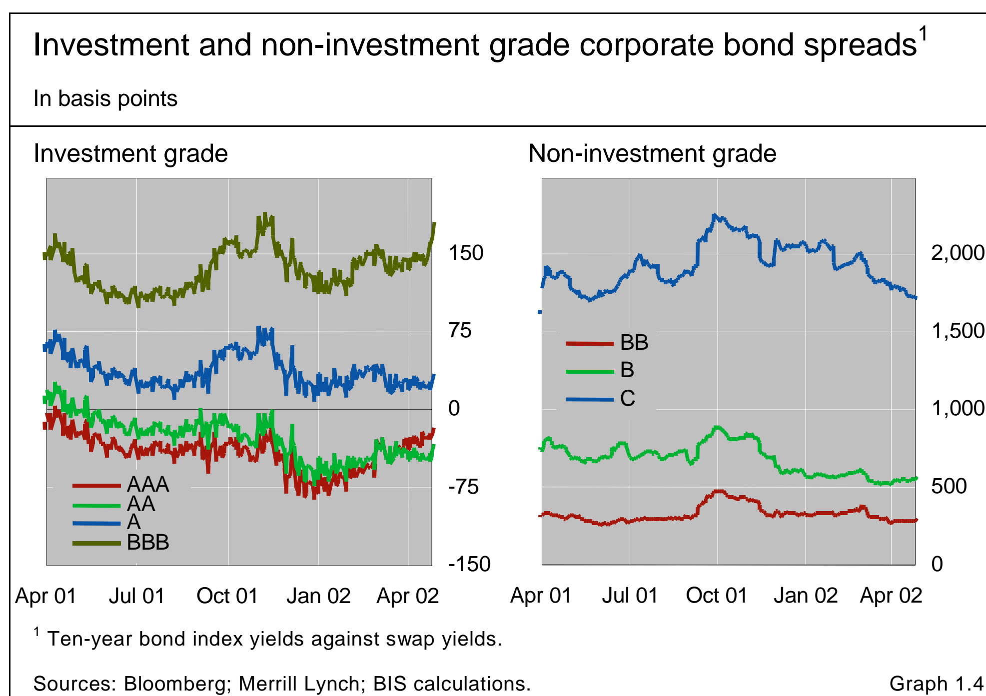
Highly rated firms are not immune

Shareholders of large firms exerted their own brand of pressure. Reacting to headlines about the funding difficulties of several high-profile corporations, investors punished the stock prices of other large firms seen as relying excessively on short-term funding. Even triple-A rated firms were not immune. In late March, share prices of one such highly rated firm, General Electric, fell sharply after the manager of a large US fixed income fund took issue with the firm's reliance on CP borrowing and the lack of complete backup liquidity lines for such debt.

The pressure to shift out of short-term debt was especially intense for low-rated borrowers in the CP market. As in most of 2001, investors in this market were hostile to all but the most creditworthy borrowers. In the early months of 2002, this hostility spread to more borrowers as rating agencies extended the

Investment and non-investment grade corporate bond spreads[1]

In basis points



[1] Ten-year bond index yields against swap yields.

Sources: Bloomberg; Merrill Lynch; BIS calculations. Graph 1.4

list of downgraded credits. The largest buyers of CP have been money market mutual funds, and it is critical for these funds that they do not "break the buck", that is, that they preserve their investors' principal. To this end, a 1991 rule by the US Securities and Exchange Commission limits the funds' holdings of non-prime CP to 5% of their portfolios. It may be that recent defaults in the CP market have led the funds to hold even less non-prime paper than the rule allows.

Banks withdraw backup facilities

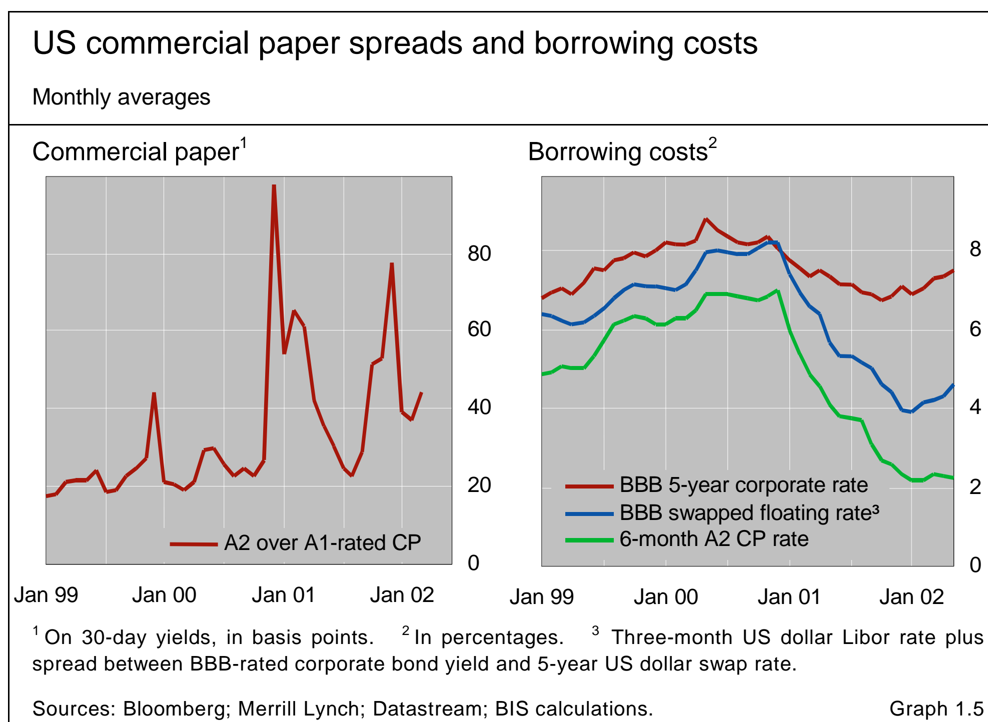
More significantly, banks began to carry out an earlier threat not to provide backup liquidity facilities for CP borrowing unless fees were raised substantially. On 29 April, JP Morgan Chase, by far the largest provider of such facilities, announced to potential borrowers that it was pulling back from the business. The irony of these moves was that these standby facilities were created in the 1970s to relieve funding problems in a CP market that was prone to seizing up. In 2002, with these backup facilities having effectively become requirements for CP issuance, the withdrawal of such facilities by large banks only added to the difficulties of the CP market.

Borrowers turn to corporate bonds ...

Those turned away from the CP market found other ways to raise funds. Some turned to the corporate bond market, where even borrowers whose A2/P2 short-term debt ratings now excluded them from the CP market found that their triple-B long-term debt ratings still appealed to bond investors. In a market where net issuance was relatively weak (see "The International debt securities market" on page 23), 10-year triple-B corporate issues required spreads averaging only about 136 basis points during the first four months of 2002, compared to 152 basis points during the fourth quarter of 2001.

US commercial paper spreads and borrowing costs

Monthly averages



[1] On 30-day yields, in basis points. [2] In percentages. [3] Three-month US dollar Libor rate plus spread between BBB-rated corporate bond yield and 5-year US dollar swap rate.

Sources: Bloomberg; Merrill Lynch; Datastream; BIS calculations. Graph 1.5

Other firms may have turned to the asset-backed CP (ABCP) market, in which the use of receivables as collateral would ensure the issue received a high credit rating. By April 2002, the ABCP market had grown to $723 billion in outstanding amounts, compared to $658 billion in the unsecured CP market.

In spite of the attractive corporate spreads, a relatively steep yield curve meant that firms paid a hefty premium to shift from short-term to long-term debt. At end-March 2002, for example, a triple-B US dollar borrower would have had to pay a fixed rate of about 7.5% for a five-year corporate issue. Having lost access to the CP market, the same borrower would still be able to borrow at a short-term rate by obtaining a swap contract that would allow it to exchange fixed rate payments for floating rate ones. The swapped short-term rate would have been about 4.4%, or 3.1% less than the fixed rate (Graph 1.5). Indeed, a number of large issuers in the US corporate bond market were reported to have swapped into floating. Spreads of five-year swap yields over US Treasury yields narrowed by 22 basis points during the first four months of 2002, in part because of such credit arbitrage transactions.

... but some swap back into floating

The ability of borrowers to swap from fixed to floating rates provides a way to assess difficulties in the CP market. The difference between a quoted A2/P2 CP interest rate and the corresponding swapped floating rate is a rough measure of the cost of the restricted access to the CP market. Fees for back-up liquidity lines would amount to 10 to 20 basis points, thus accounting for only a fraction of that difference. This interest differential rose from 1.3% at the beginning of 2002 to 2.3% by the end of April, suggesting that difficulties in the CP market worsened.

Profit warnings and accounting issues abort rally in equity market

Investors are concerned about weak corporate earnings ...

Stock markets witnessed the same seesawing confidence as fixed income markets but declined on balance in most industrial countries. Equity markets were particularly affected by the lack of evidence that earnings were recovering with the economy as a whole. Negative profit warnings continued to outnumber positive ones, although the gap has narrowed significantly since 2001 (Graph 1.1, right panel). Concerns about the reliability of corporate disclosure and accounting practices, as well as new scandals involving conflicts of interest among securities dealers, led to increasing wariness throughout early 2002 among equity investors and exerted downward pressure on share prices. Investors punished especially the stocks of companies that offered relatively complicated or opaque financial statements and those thought to be borrowing excessively in the money markets.

The equity rally that had begun in October 2001 stalled in January 2002 on concerns, induced by the collapse of Enron, about the reliability of corporate financial statements. Share prices began to rise again in late February and early March following strong macroeconomic data releases (Graph 1.6). The above-mentioned revision to US fourth quarter GDP had its strongest effect on the stock market, with the S&P 500 rising by 2.3% on that day. The gains proved short-lived, however. By the second week of March, profit warnings by

bellwether technology firms, such as Lucent and Nokia, had sent equity valuations tumbling. The warnings also renewed questions about the sustainability and strength of an economic recovery without corporate profits and a resumption of fixed investment.

... and about bad accounting and biased analysts

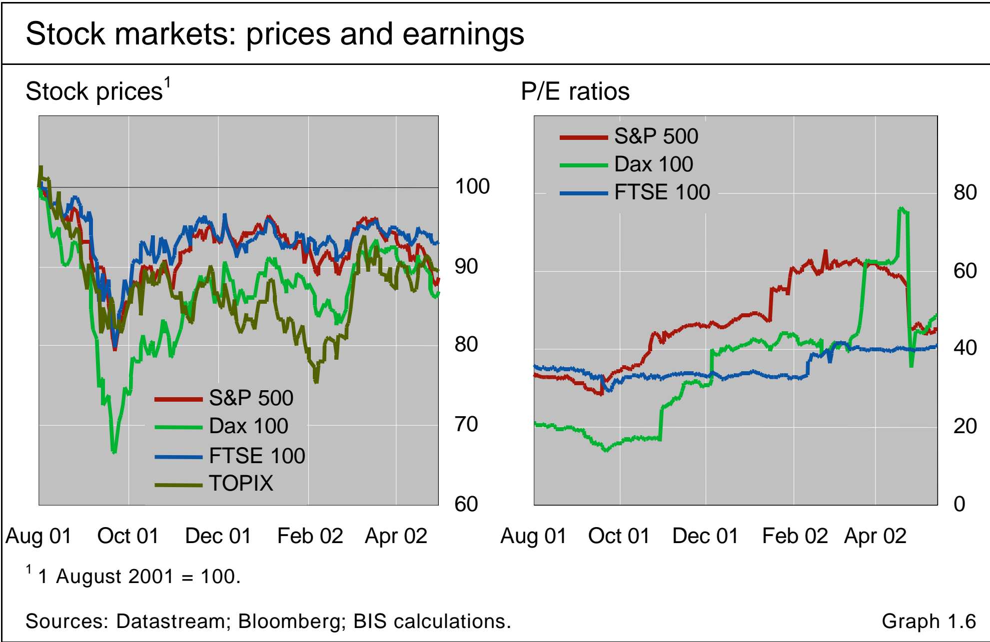
News in late March that several high-profile technology firms were having their accounting methods examined by the US Securities and Exchange Commission added to the slide of share prices as anxiety over corporate disclosures resurfaced. The coincident news of investigations into the practices of some prominent Wall Street brokerage analysts deepened the unease of equity investors. As a consequence, broad equity index declines were particularly steep from 19 March to the end of April, when the S&P 500 fell by 8%, the FTSE 100 by 4% and the Dax by 7%.

The mistrust of corporate disclosures contributed to a divergence between the performance of large capitalisation and small capitalisation stocks. During the above period, the Dow Jones Industrial Average, representing the largest companies in the United States, fell by 6%, while the Russell 2000 index of small and mid-capitalisation stocks rose 5% (Graph 1.7). Smaller firms reportedly benefited from a simplicity or lack of complication in their business, bookkeeping and financial transactions. There was also a perception among many market participants that the small companies might benefit more from an economic recovery than the larger corporations, because they rely more on internal cash flows to finance investments.

In Japan, an uptick rule supports the stock market

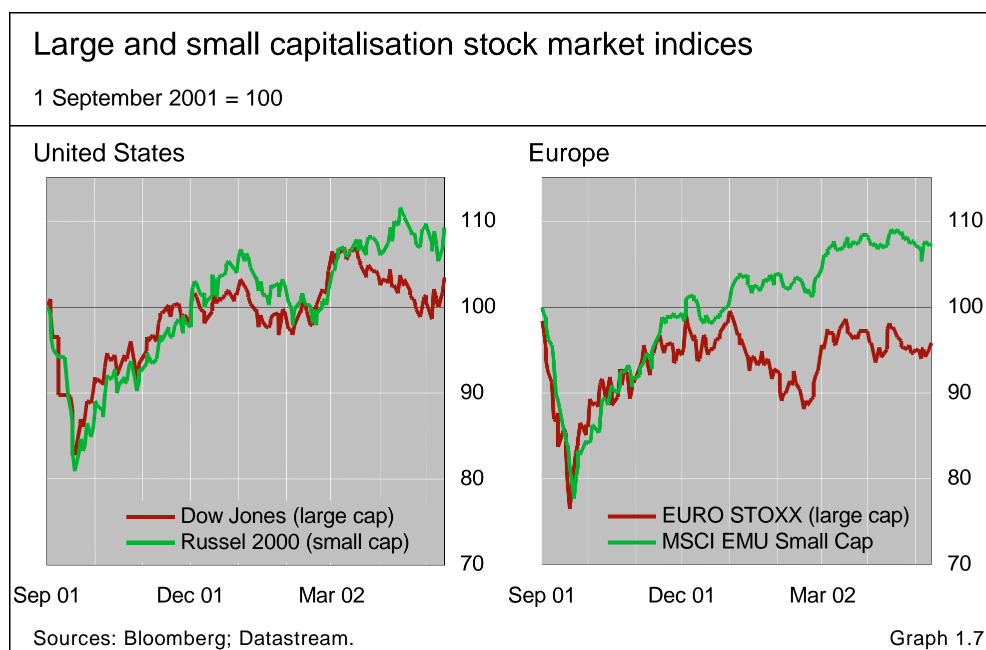
The Japanese stock market seemed to move in tandem with broader yen asset prices, often at odds with perceptions of the underlying prospects for the Japanese economy. Shares on the TOPIX rallied with Japanese debt markets, rebounding sharply in late February and early March. The reflation of Japanese asset prices and the coincident appreciation of the yen prior to 31 March

Stock markets: prices and earnings



[1] 1 August 2001 = 100.

Sources: Datastream; Bloomberg; BIS calculations. Graph 1.6



led some market participants to attribute the moves to corporate window-dressing of balance sheets at the end of the Japanese fiscal year. Some observers attributed the equity market rally to the fact that a large construction firm was allowed to fail, sending a favourable signal about a shift in the official attitude towards corporate restructuring. Other observers considered the imposition of a so-called "uptick rule" to be the more important factor. This rule prohibits a short sale of stocks without a prior increase in the stock price. Numerous market participants were reportedly short in Japanese equities when the rule was implemented and there was some confusion prior to the announcement about how the order would "punish" short sellers. The short covering of some nervous market participants reportedly pushed up prices enough to require others to liquidate their short positions, with the effects becoming mutually reinforcing.

Emerging markets join the recovery

Emerging markets gained markedly from the expectations in early 2002 of a recovery in the global economy. In spite of continuing economic problems in Argentina, sovereign spreads in general narrowed in an environment of low industrial country interest rates. Some of the strongest performing stock markets were those of Korea, Mexico and Southeast Asian countries, which were seen as having the most to gain from an economic rebound in the United States (Graph 1.8). The Russian equity market continued to rise at a blistering pace, with recent increases in oil prices adding impetus to the improving business climate.

Strong performance by Korean, Mexican and Russian stocks

Asia's newly industrialised economies were aided by expectations that recovery in the United States, even if subdued, would raise export demand. By the end of April, share prices in Seoul had risen 22% since the start of the year

and had doubled in value from their September 2001 lows. A surprisingly strong revival of global consumer demand for electronic products combined with improving domestic demand helped Korea's economy stand out in the region. Korea also received an unprecedented two-notch upgrade to its sovereign credit rating from Moody's in late March, which led to a small rally in both its stock markets and its external debt. Other Asian countries' equity returns were also high over the period, even if not matching those in Korea.

Moody's upgrades Korea

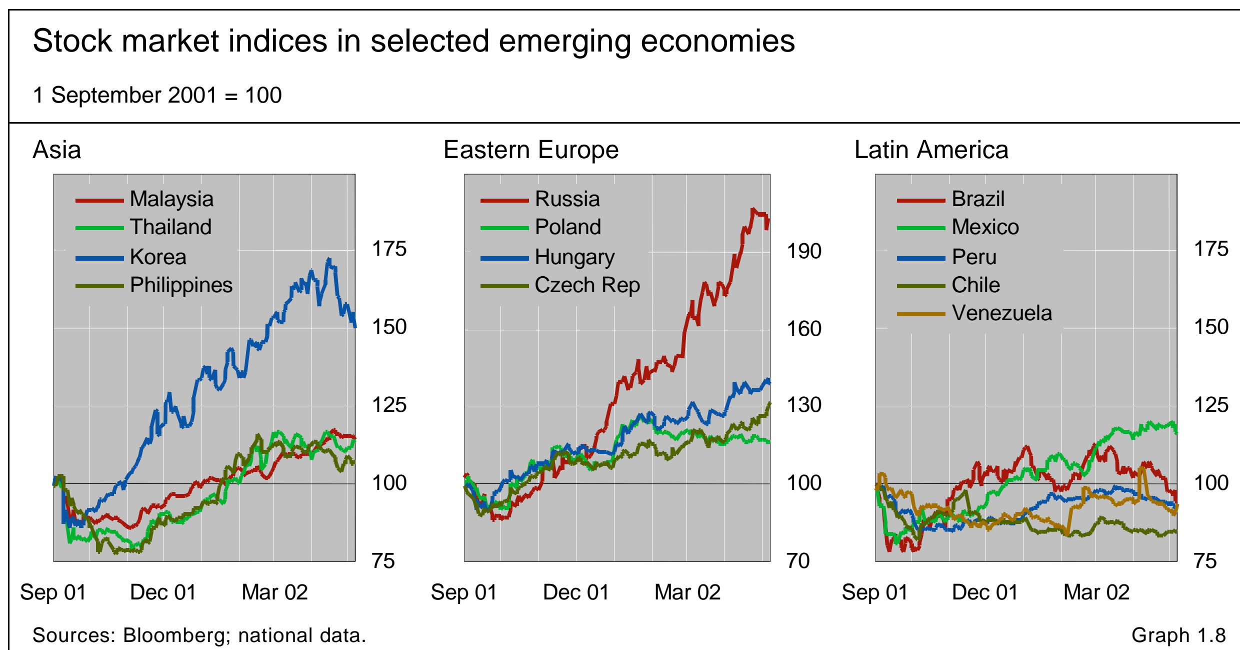
The performance of Mexican financial assets continued to diverge from that of financial assets in the rest of Latin America. Despite several consecutive quarters of economic contraction as its most important trading partner's economy slowed, Mexico continued to be the beneficiary of expectations for a return to growth in the United States. Mexico too had its external sovereign rating upgraded by rating agencies. By early May, the Mexican stock exchange had risen by 14% since the start of 2002, and Mexico's sovereign bond spread had tightened nearly 50 basis points (Graph 1.9). Other Latin American economies languished after a brief rally following the Argentine default and devaluation. In Brazil, investors became increasingly worried as the economy continued to slow and a populist running on an agenda unfriendly to markets increased his lead in presidential opinion polls. The Brazil Bovespa stock index, having risen strongly after Argentina's default, fell on net by nearly 11% between January and May; likewise, Brazil's sovereign spread widened by 200 basis points to almost 900 basis points.

Elections in Brazil worry investors

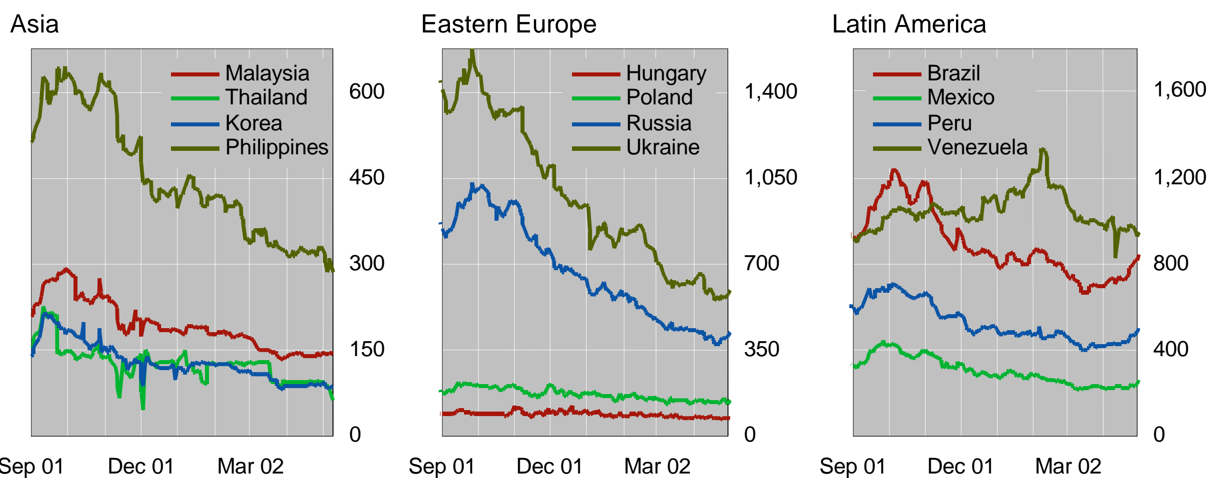
Russia, whose financial markets were unfazed throughout 2001 despite falling global economic activity and oil prices, continued to boom in the first quarter of 2002. Shares on the Russian stock exchange have risen almost 60% this year, and the country's sovereign spread has dipped below 500 basis points, less than four years after its sovereign default.

Stock market indices in selected emerging economies

1 September 2001 = 100



Sources: Bloomberg; national data. Graph 1.8



Source: JP Morgan, *Emerging Market Research*. Graph 1.9

Emerging markets were aided by both the low level of industrial country interest rates and narrow sovereign spreads (Graph 1.9). The low industrial country interest rates helped emerging market central banks to ease monetary policy without depressing exchange rates. Both Mexico and Korea were able to cut domestic policy rates and have their currencies appreciate. In addition, low interest rates are likely to have lowered the perceived risks of investing in emerging market assets. International issuance of debt securities by emerging market countries remained at the depressed level of recent years but, as discussed in “The international banking market” and the box on syndicated credits, Asian countries did begin to draw on bank credits from abroad in both the fourth quarter of 2001 and the first quarter of 2002.