Frank Packer
+41 61 280 8449
frank.packer@bis.org

Philip D Wooldridge
+41 61 280 8819
philip.wooldridge@bis.org

1. Overview: signs of growth boost confidence

Widespread signs of a global economic recovery underpinned an improvement in investor confidence in the autumn. In October especially, yields rose, equities resumed their upward climb, and corporate and emerging market spreads narrowed. Foreign exchange markets, which had seen unusually sharp movements following a G7 meeting in September, stabilised as the volatility proved to have only a limited impact on other markets.

Sentiment towards emerging markets was also boosted by a series of credit rating upgrades. In October alone, 10 sovereigns were upgraded, mostly in Asia. Attracted by favourable financing conditions, emerging market borrowers raised $19 billion in the international debt securities market in the third quarter of 2003, the largest amount in two years.

Although signs of potential problems emerged in some markets, these appeared to be isolated events. The downgrading of several automobile companies highlighted vulnerabilities in this volatile sector of the corporate bond market. The arrest of a well known Russian business leader increased doubts among investors about the country's recent promotion to investment grade. And allegations of fraud in the mutual fund industry threatened to undermine the optimism of equity investors.

Pressure on the dollar intensifies

Dollar weakening in September …

Sentiment in currency markets shifted significantly in September. The dollar, which had strengthened against the euro, and held its own against the yen and other Asian currencies during the summer bond market sell-off, depreciated sharply. Weaker than expected releases in the United States, such as the 95,000 loss in non-farm payrolls announced for August on 5 September, initially brought the dollar under pressure.

… is given further impetus by a G7 statement

Further impetus for a weaker dollar was provided by the press statement that followed the meeting of G7 finance ministers and central bank governors in Dubai, released on 20 September, which emphasised the desirability of more flexibility in exchange rates. While the statement did not attempt to guide markets in a particular direction, it was perceived by many market participants as a call for a weaker US dollar.

In particular, following the Dubai statement market participants reassessed the possible adjustment of Asian currencies against the dollar.

Whereas the euro had appreciated by 13% against the US dollar in the 12 months prior to 20 September, most Asian currencies had appreciated by far less (Graph 1.1). This had been so in spite of economic data suggesting that Asian countries were rebounding more quickly than initially anticipated from the SARS epidemic earlier in the year. This inflexibility was perceived by some market participants and politicians as an obstacle to the orderly adjustment of the US current account deficit. The Dubai statement, therefore, was interpreted as a signal that Asian countries were expected to share the burden of adjustment by allowing their currencies to appreciate. Traders pushed up the yen, Thai baht and Korean won against the dollar in the days following the meeting. Expectations about the future value of the Chinese renminbi and Hong Kong dollar against the US dollar also shifted markedly.

Adjustment against Asian currencies is marked …

Pressure on Asian currencies eased within a few weeks of the Dubai meeting. Macroeconomic news out of the United States was surprisingly positive in October, prompting traders to cover their short dollar positions. The October employment report was the first of several announcements that confirmed the strengthening of the US economy. Indeed, the GDP report released at the end of October showed that the US economy had expanded by a remarkable 7.2% in the third quarter.

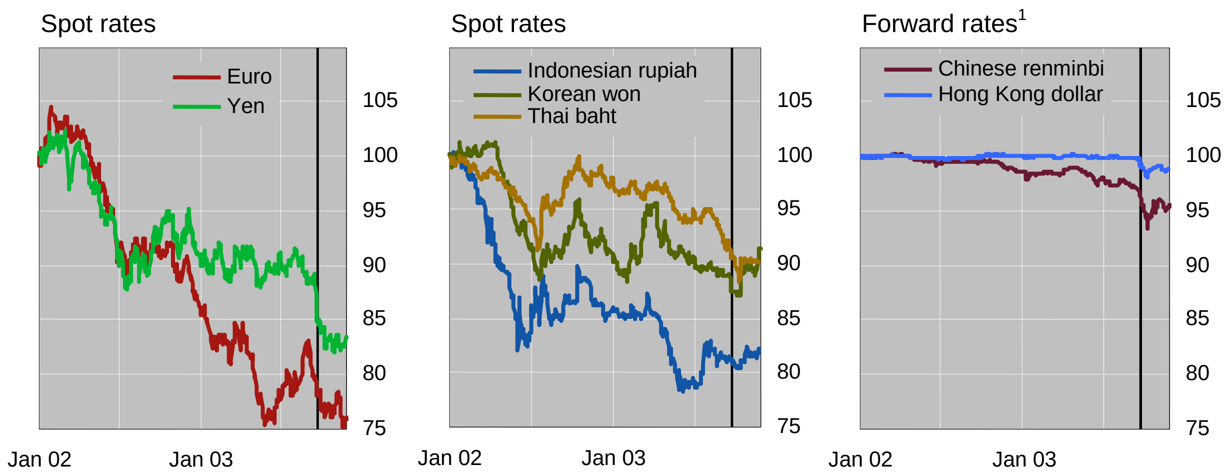
… but pressure proves short-lived

Signs that Asian financial authorities continued to intervene in foreign exchange markets to stem any appreciation of their currencies also contributed to the easing of pressure. The Japanese Ministry of Finance revealed that it had authorised the sale of more than ¥4 trillion against foreign currencies in September, a record amount of intervention. In an effort to alleviate pressure on the baht, on 14 October the Thai central bank announced that short-term funds deposited locally by non-residents would be limited in amount and no

Forex intervention in Asia continues

Exchange rates against the US dollar

1 January 2002 = 100



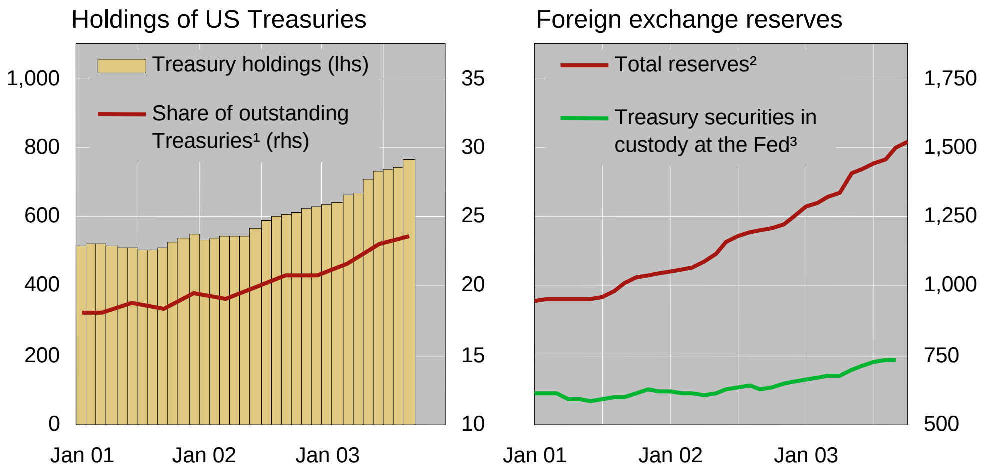
Note: The vertical lines indicate 22 September 2003.

[1] Twelve-month forward rate; for the renminbi, non-deliverable forwards.

Sources: Bloomberg; national data.

Graph 1.1

Holdings of US securities by Asian residents



Note: Asia is defined as China, Hong Kong SAR, Japan, Korea, Taiwan (China), Thailand and Singapore.

[1] Asians' holdings of US Treasury securities as a percentage of the outstanding stock of privately held Treasury securities. [2] Foreign exchange reserves held by Asian authorities. [3] US Treasury securities held in custody by the US Federal Reserve for foreign official institutions, including Asian and other central banks.

Sources: US Federal Reserve Board; US Treasury; International Monetary Fund. Graph 1.2

longer remunerated. Meanwhile, Asian residents continued to purchase large amounts of US Treasury securities in September, even as net purchases by all foreigners fell to their lowest level since the global financial market crisis of 1998. By end-September, Asians held approximately one quarter of the outstanding stock of US Treasury debt, with central banks and other official institutions accounting for the largest share of Asian purchases (Graph 1.2).

Euro strengthening resumes

While stabilising against Asian currencies shortly after the Dubai meeting, the US dollar depreciated further against the euro. Between 20 September and 28 November, the euro appreciated by 6% against the dollar, to a record high of $1.20. In addition to increasingly positive macro news out of the euro area, market participants appeared to focus on the US current account deficit and ongoing trade disputes as signals justifying a stronger euro.

Little spillover from currency to fixed income markets

Dollar yields respond to the US macro outlook …

Spillovers from currency market volatility to bond markets were limited. While concerns about foreign demand for US securities contributed to a 5 basis point increase in dollar yields on the first trading day following the Dubai statement, yield movements tended to be driven by the changing outlook for the US economy. Owing to a series of weaker than expected data releases, yields on 10-year dollar swaps finished September nearly 60 basis points down on the month (Graphs 1.3 and 1.4). However, yields then rose by approximately 30 basis points in October as signs of a strengthening US economy accumulated.

Euro yields were also unaffected by events in currency markets, and appeared to be divorced from developments in the euro area economy as well. Euro yields moved virtually in lockstep with dollar yields throughout September and October. In September, euro yields tracked dollar yields downwards, seemingly ignoring euro area data releases that tended to be better than expected. In October, they moved up in tandem with dollar yields, even though economists did not revise their growth forecasts for the euro area economy by as much as they did for the US economy.

… while euro yields move virtually in lockstep

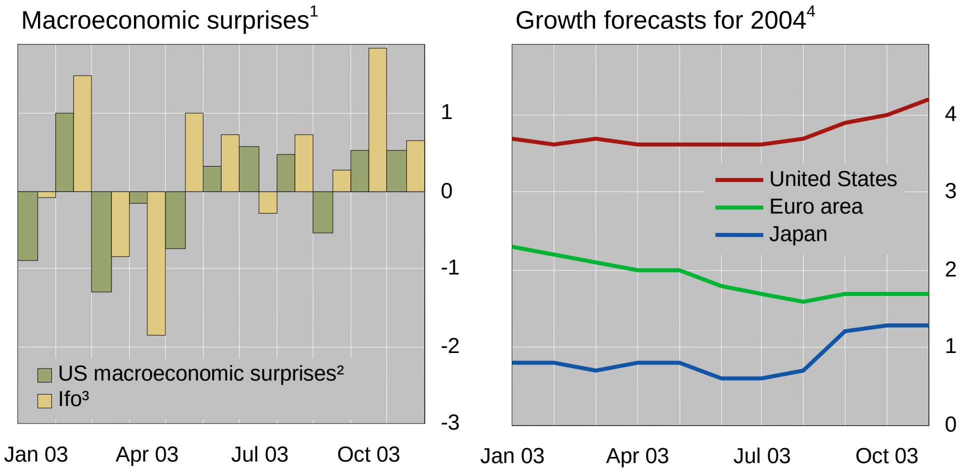
The volatility in currency markets did at times impact on yen fixed income markets, but any currency-induced moves were quickly reversed. For example, yields on 10-year yen-denominated swaps fell by 11 basis points immediately following the Dubai statement, on concerns that a stronger yen might undermine the recovery in Japan. However, they returned to their pre-Dubai levels within a few days. Even though the yen appreciated by 8% against the US dollar between mid-August and mid-October, yields on 10-year yen swaps ended the period approximately where they had begun, at 1.4%. Bolstered by a positive *Tankan* survey, strong industrial production numbers and other better than expected indicators, bond investors appeared to judge that the recovery in Japan was sufficiently well entrenched that it would not be derailed by a stronger yen.

Yields in Japan rise despite a stronger yen

Efforts by central banks to clarify their prospective policy stance may have helped to forestall further increases in yields. Following its August meeting, the US Federal Open Market Committee stated that an accommodative monetary policy could be maintained for a considerable period, which was interpreted by many market participants as indicating that the Federal Reserve would not increase interest rates even if economic growth were to move above trend for a few quarters, as long as inflation remained subdued. On 10 October, the Bank of Japan issued a statement clarifying its intention to maintain its quantitative

Central banks work to clarify their policy stance

Macroeconomic data and growth forecasts

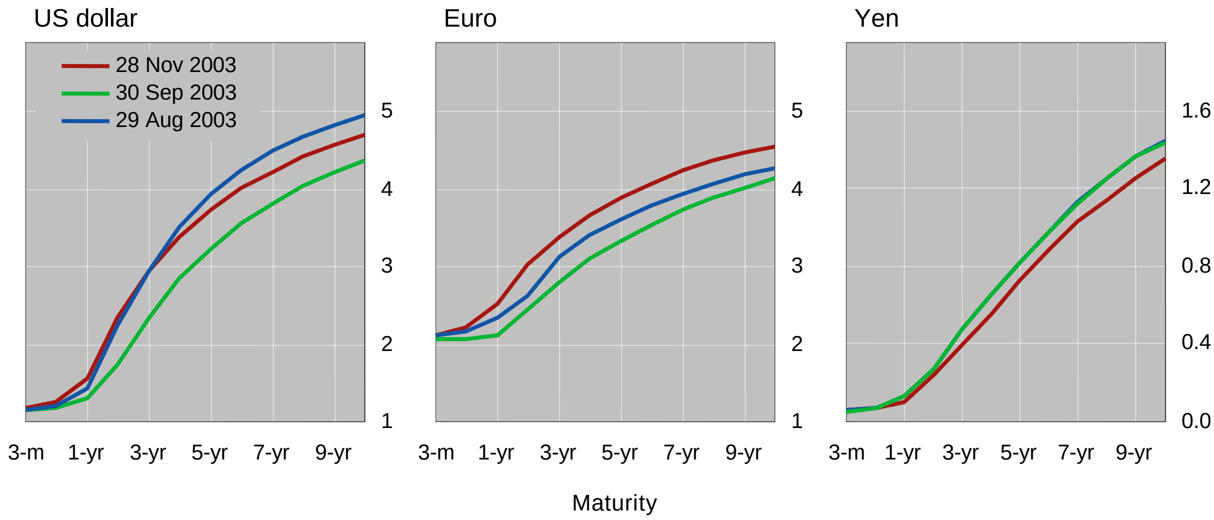


[1] Normalised announcement surprises, based on the difference between actual numbers and consensus forecasts. The observations are positioned in the month in which the actual numbers were released. [2] Weighted average of normalised surprises of the ISM survey, non-farm payrolls, retail sales and producer price and consumer price announcements. [3] The German Ifo survey is a business climate index derived by the Institut für Wirtschaftsforschung from survey responses. [4] Percentage changes over previous year. Forecasts as published monthly by Consensus Economics. The observations are positioned at the end of the month in which the forecast was made.

Sources: Bloomberg; © Consensus Economics; BIS calculations. Graph 1.3

Swap yield curves

In percentages



Note: For three-, six- and 12-month US dollar and yen maturities, Libor; for three- and six-month euro maturities, euro deposit rates.

Source: Bloomberg. Graph 1.4

easing policy at least until year-on-year changes of zero or higher were "confirmed over a few months" for core CPI, and a majority of the Policy Board forecast positive changes in core CPI over the forecasting period. Robust demand for dollar bonds from Asian financial authorities and other investors in the international debt securities market also helped to limit the impact of currency movements on dollar yields (see the box on page 33).

The decline in yields in early September seemed to help restore order to the settlement process in the US repo market, where the number of "fails", or unsettled trades, had surged in July and August. Facing a sell-off in government bond markets, some market participants had reportedly tried to take short positions by simultaneously borrowing the on-the-run 10-year US Treasury note in the repo market and selling it in the outright market. In many cases, however, such speculators could not find the security when it was time to deliver, because few investors had been willing to lend it. This evidently led to the large number of fails. Once yields fell in early September, such shorting activity apparently became less significant, and the number of fails dropped sharply.

Futures price in tightening by mid-2004

Despite the reassurances by central banks, the spate of favourable data releases in October led to a change in market expectations about the timing of future increases in dollar and euro policy rates. By the end of October, futures markets had priced in a tightening by the Fed and ECB of as much as 50 basis points by mid-2004. By contrast, most economists continued to attach a low probability to a rate hike before the end of 2004. The Reserve Bank of Australia became the first major central bank to tighten, raising its policy rate by 25 basis points on 5 November, followed a day later by the Bank of England.

Emerging markets benefit from rating upgrades

Credit spreads narrow

The year-long narrowing of credit spreads, which had paused in the summer amidst the volatility in bond markets, resumed in the autumn. Liquidity probably played a role, as investors channelled significant amounts into US high-yield mutual funds in late September and October after withdrawing funds in early August. Spreads between BBB-rated US corporate debt and US Treasuries narrowed by around 14 basis points between 1 October and 21 November, those on high-yield dollar debt fell by around 70 basis points and emerging market spreads tightened by 42 basis points (Graph 1.5).

Many sovereigns receive upgrades in October

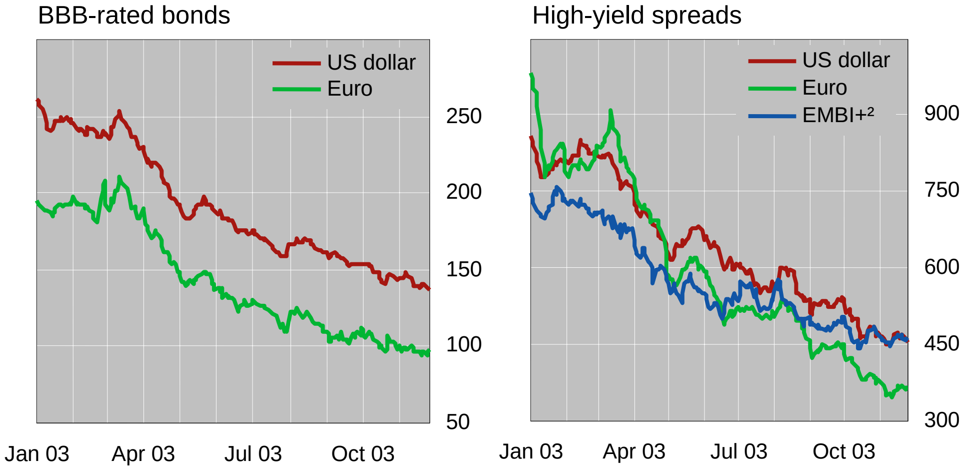
The period under review was extraordinarily positive for sovereign credit ratings, particularly in Asia (Graph 1.6). Ten jurisdictions – China, Greece, Hong Kong SAR, Indonesia, Macau SAR, Malaysia, Pakistan, Russia, Thailand and Turkey – received upgrades from at least one of the three major international rating agencies in October alone. Improving fiscal fundamentals and increased reserves were usually the headline reasons. Russia's two-notch upgrade by Moody's to investment grade capped a spectacular improvement in ratings for a country that had defaulted as recently as 1998.

Asian high-grade spreads fall markedly ...

The upgrades for sovereigns appear to have been anticipated by a narrowing of credit spreads, with an announcement effect evident only in the case of Russia. Asian investment grade sovereign spreads fell over the period to historically low levels, well below those prior to the Asian financial crisis of 1997–98. Reports of an intensifying investigation into Russia's largest oil firm Yukos, culminating in the arrest of its chief executive, led to a sharp sell-off in Russian bond and equity markets from mid-October. However, these markets subsequently stabilised at levels seen shortly before the upgrade. Moreover, events in Russia had no impact on other emerging markets.

Credit spreads[1]

In basis points

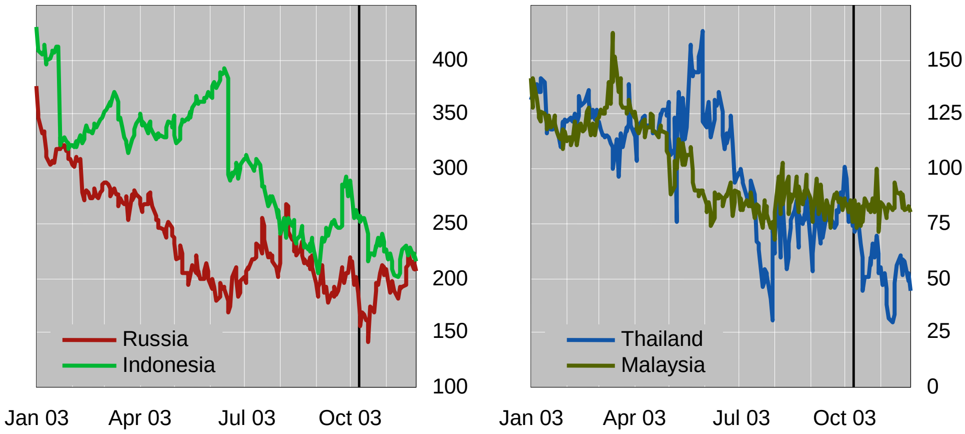


[1] Option-adjusted spread over government bonds as calculated by Merrill Lynch for corporate bond indices. [2] Weighted spread of sovereign debt instruments over US Treasury securities as calculated by JPMorgan Chase.

Sources: Bloomberg; JPMorgan Chase; Merrill Lynch. Graph 1.5

Emerging market spreads[1] and October upgrades

In basis points



Note: The vertical lines indicate an upgrade of the sovereign credit rating by either Standard & Poor's or Moody's. On 8 October 2003, Russia was upgraded from Ba2 to Baa3 by Moody's, Indonesia from B– to B by Standard & Poor's, Thailand from BBB– to BBB by Standard & Poor's and Malaysia from BBB+ to A–, also by Standard & Poor's.

[1] Spread against US Treasuries.

Sources: Bloomberg; Datastream; JPMorgan Chase; Moody's; Standard & Poor's. Graph 1.6

... amidst strong demand for Asian paper

Not all emerging market bonds saw a narrowing of spreads. Philippine bonds traded lower given lingering political uncertainties, as did Colombia's amid ongoing fiscal problems. But, in general, a continuing search for yield kept demand for emerging market debt more than ample to meet the steadily increasing supply of international bonds (see "The international debt securities market" on page 27). Aggressive pricing on China's $1.5 billion sovereign bond issue in October provided a significant example of the strength of demand for Asian paper in particular. About one-half of the issue was reportedly placed in Asia.

Meanwhile, both investment grade and high-yield bonds in the United States and euro area were also supported over the period by signs of improvement in credit quality. In addition to an accumulation of positive corporate earnings announcements, default rates continued to edge down, with the 12-month moving average of defaults as a percentage of speculative grade issuers at 5.7% at the end of the third quarter, the lowest in nearly three years.

Automobile sector downgrades add volatility

Credit markets were not entirely free from volatility, however. In the last few weeks of October, spreads widened dramatically in the automobile and related finance company sector, following Standard and Poor's unexpected downgrade of DaimlerChrysler and placement of Ford and its affiliated finance company on credit watch. There was even concern in some quarters over the potential systemic impact on financial markets if Ford were to be downgraded to non-investment grade. Ford Motor Credit, with $130 billion of unsecured term debt, is among the largest finance companies globally, and its bonds account for a significant proportion of many investors' portfolios (see the box on page 8). But S&P's announcement of a stable outlook for Ford's credit

Credit ratings of large finance companies

Eli Remolona and Dimitrios Karampatos

Finance companies are among the largest issuers of corporate bonds. Ford Motor Credit is one such issuer. Its recent downgrade raises the question of how important credit ratings are to big finance companies. Ford Motor Credit is also a fully owned subsidiary of a large manufacturing concern, and it is of interest to see what role the parent plays in the rating of a finance company subsidiary.

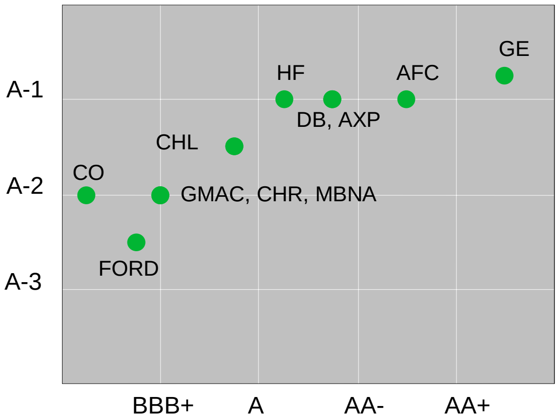
Finance companies in the United States are a diverse group of financial intermediaries. Like commercial banks, they extend credit to both households and businesses. Unlike banks, however, they do not take deposits and are thus not subject to the regulation and supervision that apply to depository institutions. According to the most recent survey by the US Federal Reserve, the US finance company sector as a whole held $1 trillion in financial assets as of mid-2000, making it one fifth the size of the US commercial banking industry.① The finance company sector is highly concentrated: there are about 1,000 US finance companies, but only 20 of them account for nearly 70% of all the sector's receivables.

Having no access to deposits as a source of funds, the large finance companies rely heavily on the debt securities markets, while the smaller ones depend on bank credit. The corporate bond market is the main source of funds for the sector as a whole, providing at least one third of the sector's funding. The commercial paper (CP) market is the second most important source, accounting for about 18%.

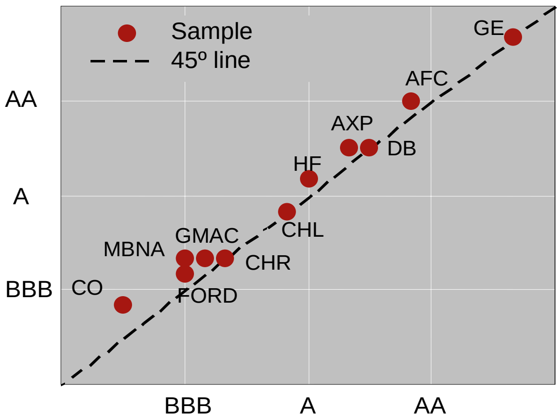
The reliance on securities markets makes credit ratings crucial to large US finance companies. The ratings determine their cost of funds and thus the terms on which they can compete with other financial intermediaries.② These ratings consist of short-term ratings for the CP market and long-term ratings for the corporate bond market.

Ratings of large US finance companies[1]

Short-term versus long-term rating[2]



Finance company versus parent rating[3]



[1] Average rating between Standard & Poor's and Moody's, as of the end of November 2003. AFC is Associates First Capital, AXP American Express, CHL Countrywide Home Loans, CHR DaimlerChrysler Financial Services, CO Capital One Bank, DB Discover Bank, FORD Ford Motor Credit, GE General Electric Capital, GMAC General Motors Acceptance Corporation, HF Household Finance and MBNA MBNA America Bank. [2] Short-term rating on the vertical axis, long-term rating on the horizontal axis. [3] Long-term rating for the finance company on the vertical axis, long-term rating for the parent company on the horizontal axis.

Source: Bloomberg.

① For a comprehensive discussion of the survey, see K E Dynan, K W Johnson and S M Slowinski, "Survey of finance companies, 2000", *Federal Reserve Bulletin*, January 2002, pp 1–14. ② For an analysis of how finance companies compete with banks, see E M Remolona and K C Wulfekuhler, "Finance companies, bank competition and niche markets", *FRBNY Quarterly Review*, Summer, 1992, pp 25–38.

Raising funds in the CP market on a regular basis effectively requires a high short-term rating – eg P-1 from Moody's or A-1 from Standard & Poor's. A lower rating is a serious handicap, because money market mutual funds, which are the most important investors in the CP market, are severely limited by regulation in how much lower-rated paper they can hold.[3] There is a rough correspondence between short-term and long-term ratings. As shown in the left-hand panel of the graph, a single-A long-term rating tends to serve as the threshold between high and low short-term ratings. When downgrades in early 2002 pushed the largest automobile finance companies below this threshold, they lost access to the CP market (although they could still issue asset-backed CP by securitising receivables) and had to rely more heavily on the corporate bond market.

The largest finance companies tend to be subsidiaries of other corporations, and for these companies the single most important determinant of long-term ratings is the rating of the parent.[4] Indeed, the three large automobile finance companies are "captive" subsidiaries in that they are largely in the business of lending to finance their parents' products. When Standard and Poor's announced the downgrade of Ford Motor Credit in November 2003, the rating agency's rationale was simply, "The ratings on Ford Motor Credit reflect those of its parent, Ford Motor Co". As shown in the right-hand panel of the graph, in a sample of 11 large finance companies, the parent and the subsidiary are assigned the same rating in the majority of cases. When the ratings differ and the parent is not itself a financial intermediary, the subsidiary tends to have the higher rating. When only the subsidiary is a financial institution, it needs the high rating more than does the parent, and the financial ties between the two will often be designed to favour the subsidiary's rating.[5]

In the long run, credit ratings are critical for the viability of a large finance company. Since ratings determine the cost of funds, a finance company cannot indefinitely continue to operate with ratings lower than those of its competitors (unless it has a parent with sufficiently deep pockets willing to provide subsidies). In 1990, for example, Chrysler Financial was the fourth largest finance company in terms of receivables, about half the size of Ford Motor Credit. However, Chrysler Financial had just been downgraded to BBB– at a time when two of its rivals, GMAC and Ford Motor Credit, still had AA– ratings. Large commercial banks in the business of automobile finance also tended to have double-A ratings. As a consequence, Chrysler Financial steadily lost ground until its parent merged with Daimler-Benz in 1998, by which time it was less than one fifth the size of Ford Motor Credit.

____

[3] Under a 1991 rule of the US Securities and Exchange Commission, money market mutual funds may hold no more than 5% of their portfolio in the form of lower-rated CP. [4] This result has been established empirically by Remolona and Wulfekuhler (1992). [5] These financial ties may include attorney's letters and debt covenants that prevent the parent from taking capital out of the finance company.

rating upon its downgrade to BBB– on 12 November diminished fears that a downgrade to junk bond status was imminent. Indeed, spreads on Ford debt narrowed to the levels seen before the corporation was placed on credit watch.

Equities rally on strong earnings

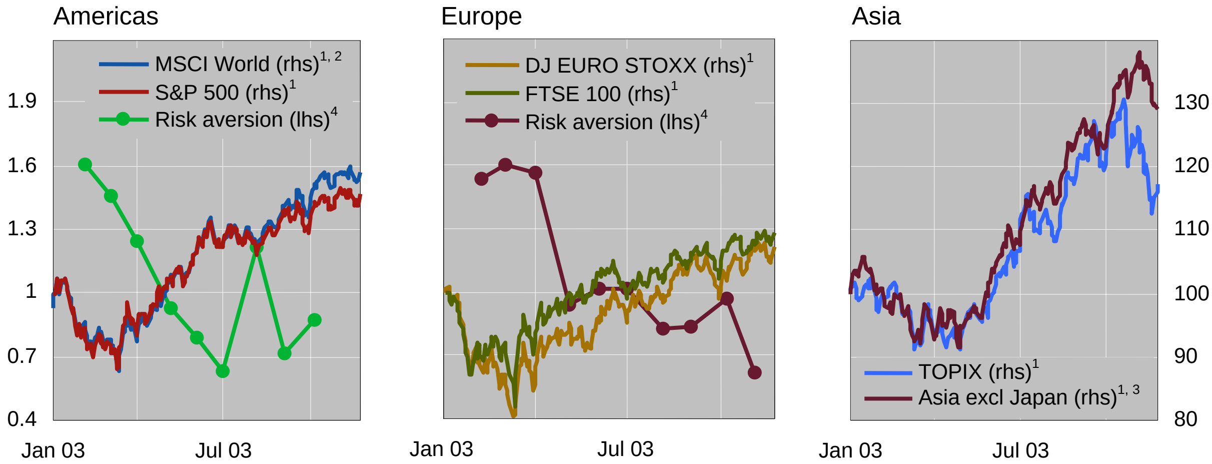
Global rally in equity markets resumes …

The improving economic outlook gave a further boost to global equity markets starting in early September. After being rangebound from mid-June to late August, the MSCI World index gained 8% between 29 August and 28 November (Graph 1.7). Many emerging markets posted double digit gains, with Argentina, Brazil and Turkey all rising by upwards of 30%. This brought the total increase in the MSCI World since the trough on 12 March to 37%.

… as earnings growth accelerates

In the major markets, investor optimism was fuelled by an acceleration in earnings growth. Earnings per share reported by companies included in the

Equity markets



[1] End-December 2002 = 100. [2] In US dollars. [3] MSCI index; in local currency. [4] Derived by comparing probabilities implied by option prices, on S&P 500 and FTSE 100, with probabilities estimated from a time series of realised returns, using the approach of Tarashev et al in "Investors' attitude towards risk: what can we learn from options?", *BIS Quarterly Review*, June 2003.

Sources: Bloomberg; Datastream; BIS calculations. Graph 1.7

S&P 500 increased by 20% year over year in the third quarter, significantly above analysts' initial forecasts and up from 11% in the second quarter. Profit margins were boosted by further cost cutting; productivity in the US non-farm business sector improved by an astounding 8% in the third quarter. Sales also picked up in many sectors, in particular technology-related sectors. Despite the recent volatility in bond markets, investment banks reported surprisingly strong earnings.

Even while reporting better than expected sales and profit growth in the third quarter, many firms, including Cisco, Amazon and other bellwether firms, warned that the outlook for 2004 was uncertain. US companies announcing negative outlooks for future earnings continued to outnumber those announcing positive outlooks (Graph 1.8).

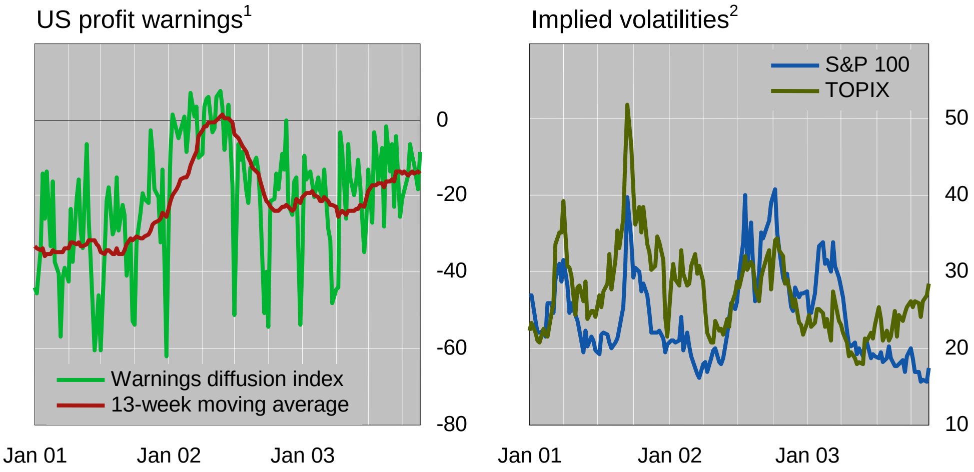
US investors show greater confidence than firms

Investors in the United States, however, appeared to discount these warnings and to demonstrate greater confidence in the economic outlook than firms themselves. Although weaker than expected macroeconomic news did weigh on US equity markets in late September, any uncertainty was allayed by October's data releases. Reflecting both perceived future volatility in market returns and investors' risk aversion, implied volatility in equity index options declined to unusually low levels in late October and early November: 16% for the S&P 100, compared to 23% on average over the first nine months of 2003 (Graph 1.8). Indeed, estimates of effective risk aversion derived from these options remained low (Graph 1.7). The impressive rally in equity markets so far this year appeared to support a growing appetite for risk.

Japanese investors begin to question valuations

In contrast to US markets, in the Japanese equity market investors seemed increasingly uncertain about the future. Japanese equities experienced some exceptionally large daily swings even in the absence of significant news.

Profit warnings and equity market volatility



[1] Difference between positive and negative announcements by companies regarding forecast earnings as a percentage of all announcements. [2] Implied volatilities of index call options; weekly averages.

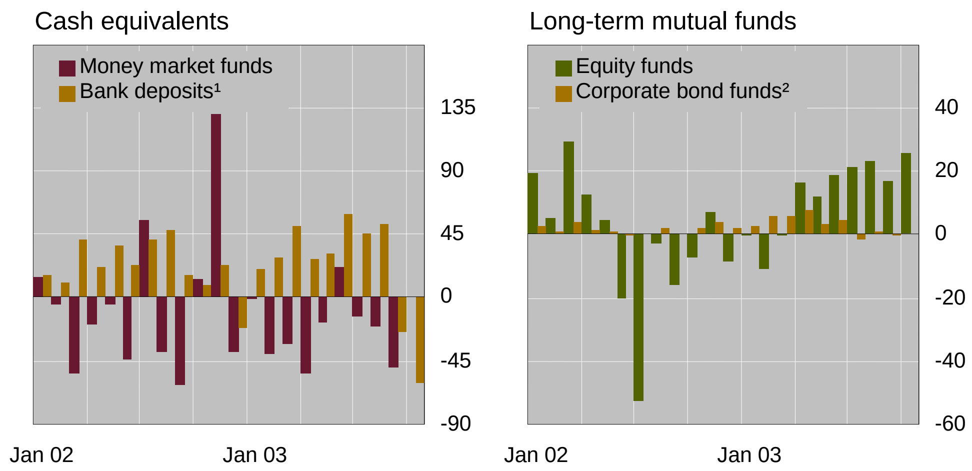
Sources: Bloomberg; BIS calculations. Graph 1.8

For example, on 23 October the TOPIX fell by 5% despite the lack of any identifiable trigger. It rebounded over the following week before turning down again in early November. This volatility appeared to reflect growing doubts about prevailing valuations, and in particular about whether fundamentals in Japan had improved sufficiently to justify the 25% increase in the TOPIX since the end of April.

It was notable that investor sentiment proved robust to investigations into some of the key institutions underpinning the functioning of modern financial

Portfolio flows by US investors

In billions of US dollars



[1] Monthly change in the seasonally adjusted stock of funds on deposit with commercial banks in the United States. [2] Includes high-yield bond funds.

Sources: US Federal Reserve Board; Investment Company Institute. Graph 1.9

markets. In mid-2002 revelations of accounting and governance improprieties at several prominent firms had rocked equity markets. By contrast, in September 2003 questions about the governance of the New York Stock Exchange – the world's largest and most liquid equity market – and the resignation of its chairman seemed not to dampen confidence. Also starting in September, allegations of fraud unsettled the mutual fund industry and raised concerns about a potential liquidation of assets by mutual funds facing charges to meet withdrawals. In the United States, most retail investors own mutual funds; the industry manages over $7 trillion in assets. US state regulators in conjunction with the Securities and Exchange Commission charged several funds with improper trading, including late trading after the price had been fixed for the day. Those fund managers facing charges did experience large withdrawals, but to date there have been no signs of a more widespread redemption of funds. On the contrary, the rally in equity markets appeared to prompt US investors to shift out of bank deposits and other cash equivalents in September and October and into equities, including into equity mutual funds (Graph 1.9).

Allegations of fraud unsettle the mutual fund industry