The terrorist attacks on the United States have increased the degree of uncertainty in financial markets. It is still too early to say what the immediate consequences will be on real economy trends, not least as macroeconomic performance was already held back by a declining business confidence, but the economic implications in the short to medium term are obviously not positive. In the immediate aftermath of the attacks, financial markets reacted nervously, with investors scrambling to perceived safe havens (notably treasury bonds) and more risky assets priced down sharply. The central banks acted decisively in preventing a shortage of funds by supplying liquidity to the markets and by cutting official short-term interest rates. In this context, market participants expressed expectations of further future cuts in official interest rates.

Since the last issue of this publication in June, few unambiguous signals about changes in the macroeconomic outlook have been brought to the market. However, declining official interest rates in the euro-zone and the United States have had a major impact – not least since they have been interpreted by some analysts as an indication that authorities expect a further cooling of the economy.

I. Currency markets

In the recent months, the euro has appreciated against the US dollar (Figure 1), and also against other major currencies. From early July to late August, the currency appreciated more than 5 per cent against the dollar, eventually climbing above 0.90. A temporary weakening of the euro in the first half of September was taken as evidence of short-term profit taking on a bulk of speculative accounts that were built up earlier this year with the expectation of a stronger euro.
Financial Market Trends, No. 80, September 2001

Figure 1. Comparative daily exchange rates: relative to US dollar

Source: OECD.

when the euro peaked. Nevertheless some analysts have questioned the sustainable of a more general appreciation: this is the third time that the euro has appreciated more than 5 per cent in nominal terms during a single appreciation phase, and on the two previous occasions it quickly returned to lower levels.

as US interest rates declined...

One of the factors driving foreign exchange markets has been interest rate developments. The shifts in interest differentials, that was triggered by eight cuts in US official rates this year provided support for the euro. The reduction in euro-zone interest rates in August narrowed the differential and could be an additional factor behind the halting of the upward trend in September. A generally lower appetite for risk on the part of investors, and the concurrent portfolio shifts from stocks to bonds, has amplified market sensitivities. Balance of payments figures show that the euro-zone recorded net inflows in recent months, which has been taken to indicate a lower demand for US dollar (USD) denominated securities, at least in the run-up to the terrorist attack in September.
With mixed evidence from the major economic areas dominating the news, it would be hard to claim the presence of any single macroeconomic factor behind the recent movements in bilateral exchange rates between the euro and the US dollar. However, the fact that the dollar weakened vis-à-vis all major currencies over the summer was interpreted as a further sign of shifts in investor sentiment away from US securities. Such a change might have been triggered by US authorities' widely published downgrading of their assessment of the macroeconomic outlook. The fact that the monetary easing in August was received coolly by markets (contrary to earlier episodes neither stock markets nor USD rates rallied), was taken as further indication of a shift in market sentiment.

While the economic indicators for Europe and United States are mixed, the macroeconomic trends in Japan seem to point generally downward. The travails of the Japanese economy have induced international rating agencies to put Japanese debtors on the watch list. Standard and Poor's announced that long-term local authority and foreign currency sovereign credit ratings have been revised from stable to negative due to Japan's limited fiscal flexibility and persistent problems in the financial sector. Moody's decision to put yen dominated bond under review for a possible downgrading was likewise done with reference to fiscal strains in view of the country's on-going macroeconomic weakness. However, reflecting Japan's strong external position, both agencies kept the rating of internationally issued bonds unchanged.

II. Equity markets

During the summer, equity indexes have shown little short-term volatility, but recent trends have clearly been downward. This development follows a period with global falls in technology stocks of as much as 50 to 80 per cent in all major markets. As a result, technology indices are at the moment close to the levels they recorded three years ago.

The broader stock indices have shown declines in the range of 15 to 30 per cent between June and 14 September (Figure 2). The declining trend was driven by continuing...
reports of disappointing earnings forecasts and uncertainties about the future economic climate. The cuts in policy-controlled interest rates in 2001, on the other hand, have not been able to arrest the underlying pressures from sellers on the equity markets (although monetary easing in the first half of 2001 did provide stock prices with temporary reprieves). That said, it is of course unclear what might have happened in a counterfactual scenario.

In the assessment of most market analysts, the declines in equity prices have brought the indexes more in line with fundamentals. However, the prices of stocks in some companies are still higher than historical experiences would seem to suggest. For instance, notwithstanding considerable drops in stock prices, many US companies’ price-earnings (P/E) performance indicators have remained at a high level, as company earnings declined almost proportionately. The overall S&P 500 P/E index in late August stood just below 30, unchanged from the level just before the latest correction of stock prices got underway (Figure 3). In the aftermath of the terror attack on the 11 September, stock indices declined in...
Highlights of Recent Trends in Financial Markets

In the United States, Dow Jones registered its largest ever point loss when Wall Street reopened. It is to be noted, however, that this drop affected sectoral indices very differently: the equity of particularly “exposed” economic sectors (e.g. airlines) lost almost half its value, while some other sectors hardly budged.

III. Trends in fixed-income markets

The easing of monetary policy on both sides of the Atlantic has had a major impact on fixed-income markets. The eight consecutive cuts in US official rates amounted to a cumulative decline in short-term market rates of around 350 basis point (for the concurrent developments in market rates, see Figure 4). In the view of the latest developments, most market participants expect short-term interest rate to continue falling. In the euro-zone, three cuts in official interest rate have been reflected in downward movements in the short-term market rates as well. The fact that short term interest rates in Japan have been close to zero since the first quarter 2001 naturally limits the scope for further downward movements.

FIGURE 3. Historical price – earnings ratios (selected indices)

Source: Datastream.
As for the longer-term market, 10-year benchmark government bond rates in early September stood at around 5 per cent in both the euro-zone and the United States, which represents a small decline since the beginning of the summer (Figure 5). The decline for the year to date has been low when compared with the short-term rates, resulting in a significant steepening of the yield curve. A steeper yield curve has in earlier recession periods been perceived as a signal of improving economic prospects (not least as it has been correlated by improved conditions on the stock markets – e.g. United States around 1990), but few analyst have drawn similar inferences from the recent developments.

The negative outlook for corporate earnings has affected the assessment of credit risk and other conditions bearing on credit markets. More concretely, fears of lower debt servicing capability in the corporate sector following widespread profit warnings in second quarter have contributed to a widening of spreads. During the summer, US corporate spreads above Treasuries had been fallen by some 30 to 40 basis points, but they are now back to the levels prevailing at the end of the second quarter (Figure 6).
Yield spreads between US corporate bonds and 10 year treasuries

Figure 5. Long-term interest rates

Source: Datastream.

Yield spreads between US corporate bonds and 10 year treasuries

Figure 6.

Source: Federal Reserve Board.
The mounting signs of deteriorating credit quality has so far had most pronounced effects on the high yield market, since speculative-grade paper is traditionally more exposed to general market conditions and to weaker operating performance. Market participants have described the market as being in better conditions than in December 2000 when the spreads peaked, but it is still perceived as vulnerable.

Consistent with the changes in relative pricing, market participants report that investors have undertaken a shift down the credit curve, whereas higher premiums have affected issuance to the point where only issuers with relatively high credit ratings continue to find markets attractive. However, a more general cooling of the corporate bond markets has not taken place. The euro-zone bond market has continued to attract attention from investors, and the net withdrawal of government bonds in many economies has induced them to shift toward corporate assets. Moreover, banks have actively encouraged clients to tap the bond markets.

In recent years, the levels of firms’ leverage have received attention and have been a cause of concern among financial market analysts. In the United States, the consensus view is that share buyback programmes were among the underlying factors behind the past strength of stock prices. Critical voices have even argued that the repurchases may have been excessive, and partly influenced by companies’ incentive payment schemes. On all accounts, high levels of corporate debt were seen in the United States in the second half of the 1990s – at a time when the cost of raising equity capital was historically low. Even though analysis shows that corporations as a group are in good financial shape, the high leverage leaves them more vulnerable to an economic slowdown.\(^2\)

The tendency toward higher leverage has spread to Europe in recent years, as big merger and acquisitions deals have been financed by issuance of debt – not least in the telecom sector. Initially, market participants expected the trend toward increased indebtedness to continue in the near future as management, under mounting pressure from shareholders, attempt to increase their return on equity by boosting balance sheets.
As of recently, however, indications have emerged that US companies in particular have become more conservative in their structuring of balance sheets. The announcements of equity buybacks have declined in 2001, *inter alia* because the drop in the value of corporate equity has increased firms' gearing measured at market prices, and hence has limited management's freedom of manoeuvre.

So far the financial sectors in most countries remain robust, and their credit intermediation has held up well in the face of the economic slowdown. In Europe and North America banks report stable profitability figures, even as their corporate finance and asset management activities have suffered from the negative development in equity markets. The future strength of the banking sector will most likely be determined by trends in default rates.

**IV. Focus on the telecom sector**

The telecom sector has received particular attention lately, due to its size and its exceptionally high financing requirements. Bond issuance from the sector, for example, has had a major impact on the volume of activity in the capital markets. The issuance of international bonds by telecom companies amounted to USD 114 billion in 2000, which is more than three times the figure recorded two years earlier (Table 1).

![Table 1. Credit facilities for telecom companies (billion USD)](attachment:table1.jpg)

The largest part of credit to telecommunication companies, however, continues to flow from syndicated credits. International syndicated credit facilities to telecommunication companies surged from USD 68 billion in 1998 to USD 256 billion in 2000. European companies picked up the largest individual share of the facilities, accounting for almost 20 per cent of the entire syndicated loan market.

© OECD 2001
… leading to lower credit ratings.

As many analysts had predicted at the beginning of the year, the telecom industry has attracted attention, due to a large number of downgrades by rating agencies. One fourth of the rated telecom corporates have received a downgrade, while only a few companies have been upgraded. Overall, the telecommunication sector has accounted for 30 per cent of all credit rating downgrades in Western Europe so far this year. It should, however, be kept in mind that rating actions on incumbent telecom operators have generally been less severe than in 2000.

Companies may have overextended themselves...

Many of the current sectoral pressures date back to severe adjustments that took place in August 2000 and were fuelled by concerns over a serious deterioration in balance-sheet performance which caused rating agencies to make adjustments. The concerns arose after the bidding war for Europe’s universal mobile telecommunications system licences, which is estimated to have cost approximately USD 135 billion in Western Europe alone.³ Adding to the financial needs, a similar amount is required to finance the built-up of new infrastructures for third generation nets. Finally, the merger and acquisition activities have to large degree been financed through extensive reliance on borrowing, a large part of which at relative short maturities.

… and weak equity prices makes a retreat difficult.

When technology stocks tumbled, many companies were on the verge of floating new equity, but the negative development on the equity markets led many initial public offerings (IPO) to be postponed or fail to generate the prices initially envisaged, which resulted in telecom companies being saddled with more longer-term debt than expected.

The stress on banks seems limited...

At this juncture, market participants consider the risks posed to the banking sector from telecoms as manageable. A large part of the borrowers are investment grade issuers with a stable cash flow, especially due to the sustained incomes they derive from older fixed-line systems. Furthermore, the fact that the sector retains a relatively generous access to market financing and can rely on undrawn credit lines – it was estimated in April that 30 to 40 per cent of the loan commitments in telecom exposures were undrawn – remains an important element.
However, the widely cited recent announcement by one operator that, due to the negative stock market developments, it would not be able to reduce borrowings as quickly as promised, has been taken by some as a pointer to greater underlying problems. The rating agencies had indicated earlier that further downgrades are likely unless the companies reduce their indebtedness through asset disposals and demonstrate a stronger sustainable income growth. Many telecom companies appear to prefer postponing asset disposal, reportedly because they consider such action at the currently low prices as a more ominous signal to financial markets than a potential further downgrade of ratings. A renewed weakness could also mean potential losses for the banking sector if the credit spreads that were originally imposed turn out to have been insufficient.

V. Venture capital

The global venture capital industry, after having passed through a period of frenzied expansion with speculative overtones, is now in a phase of correction that leaves many observers uncertain about the future of the industry. Venture capital has been one of the fastest growing components of the financial system of the OECD countries in the 1990s, with commitments to the venture capital industry rising twentyfold in the US between 1991 and 2000 and twelvefold in Europe.

Throughout this period, the European venture capital industry has trailed the United States industry by a considerable margin. PricewaterhouseCoopers (PWC) estimates that investments in venture capital amounted to some 1.2 per cent of GDP in North America, but only 0.4 per cent in Europe (although wide differences are found across European countries). Many analysts attributed the relative backwardness of the European industry to structural factors including disparate legal and tax regimes for venture capital and, restrictions on investments by institutional investors. Another factor apparently holding back the expansion of European venture capital was the lack of effective “exit vehicles”, especially stock exchanges suited to smaller and innovative companies.
Notwithstanding the continuing gap between Europe and America, the industry grew at a dizzying pace in both regions in the second half of the 1990s, as sentiment became increasingly bullish on the technology sector and on equity investment. By the late 1990s, many investors were convinced that technology had led to permanently improved long-term economic prospects in OECD countries. Many investors believed that in view of the economy's capability to achieve higher growth and higher profitability, a permanently higher standard for equity valuation was justified. Beyond this, many market participants believed that, by bringing technology, entrepreneurship and finance together in a dynamic manner, venture capital was one of the main drivers of the “new economy.” The venture capital sector, which had financed many of the emerging high technology companies over the past two decades, benefited disproportionately from this perceived capability of technology to improve long run economic results.

In addition to the global factors that encouraged worldwide growth of venture capital, some breakthrough were made in removing structural impediments to growth in Europe. Institutional and individual investors have had greater scope to direct funds into this sector while several successful “growth exchanges” were launched that developed into effective exit mechanisms. These “growth” equity exchanges included the Alternative Investment Market (AIM) in the United Kingdom, the Neuer Markt in Germany and the Nouveau Marché in France as well as similar markets in Spain, Italy and Switzerland. Both in America and Europe, the possibility to launch IPOs at very favourable prices provided venture capital investors with substantial gains that could in turn be invested in newer projects at earlier stages of the venture capital cycle.

Both funds raised and funds invested have been growing rapidly in North America as well as in Europe since around 1997 (Table 2). At the same time, the high level of exits, both through trade sales and through IPOs, returned very high sums to venture capital firms. As a result, the venture capital industry now has significant sums of funds available to
Highlights of Recent Trends in Financial Markets

Thus PWC estimates that in Europe the venture capital industry has €30 billion available for investment. It is now nearly universally accepted that standards of investment discipline slackened as investors rushed to build exposure in the technology sectors. IPOs took place at inflated prices as many companies with highly tentative business plans and little or no history of earnings were floated publicly. The volume of flows into the industry also overwhelmed capacity of market makers to maintain liquidity in these stocks while in many instances data flows were few and research coverage inadequate.

Since April 2000, a massive correction has been under way. In the first place, final spending by business and consumers on technology-based equipment has been cut back sharply. Equity markets worldwide have experienced simultaneous corrections as growth prospects became uncertain and as investors increasingly questioned whether existing equity values could be sustained in view of a less optimistic outlook for corporate profitability. The drop in equity markets has been of a larger magnitude in the “growth” equity markets, with some exchanges losing up to 80 per cent of their value in the year (Figure 7). Even NASDAQ, which is one of the three largest equity markets in the world with a 30-year history of operations, has lost 60 per cent of its value. In several of these markets, many stocks have effectively become illiquid.

Table 2. Venture capital (invested and funds raised)

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount of US venture capital invested (USD billion)</th>
<th>Funds raised by US venture capital firms (USD billion)</th>
<th>Amount of venture capital invested in Europe (€ billion)</th>
<th>Funds raised by venture capital firms in Europe (€ billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>11.4</td>
<td>11.3</td>
<td>4.1</td>
<td>n.a</td>
</tr>
<tr>
<td>1998</td>
<td>15.0</td>
<td>19.7</td>
<td>6.0</td>
<td>6.7</td>
</tr>
<tr>
<td>1999</td>
<td>38.2</td>
<td>34.5</td>
<td>10.7</td>
<td>12.1</td>
</tr>
<tr>
<td>2000</td>
<td>68.8</td>
<td>69.1</td>
<td>19.7</td>
<td>22.1</td>
</tr>
<tr>
<td>2001*</td>
<td>16.2</td>
<td>27.8</td>
<td>n.a</td>
<td>n.a</td>
</tr>
</tbody>
</table>

* First 6 months.
Source: VentureOne Europe.

... has given way to a period of correction....

© OECD 2001
… as weak stock prices have rendered exit difficult.

With the “growth” markets in distress, the possibilities for venture-related exits shrunk considerably. In the United States, data from Venture Economics and the National Venture Capital Association, showed a sharp decline. In 1999 and 2000, more than 250 venture related IPOs had occurred each year, with the total value of IPOs reaching USD 25 billion in 2000. In the first half of 2001, only 21 IPOs with a value of USD 1.7 billion have been brought to the market. The number of venture-backed mergers and acquisitions actually held up, but deals were much smaller. There were 139 venture backed M&A operations in the first half of 2001 against 275 in the full year 2000, but the value of M&A exits amounted only to USD 9 billion in the first six months of 2001 against USD 68 billion in all of 2000.

The funds raised are markedly lower...

With the decline in exit possibilities and a reassessment of prospect for the high tech sectors, inflows into the venture capital are down sharply from 2000. Data from Venture Economics covering the United States show that funds raised were down 68 per cent in the first half to USD 26 billion compared to USD 104 billion in the full year 2000. In Europe, fewer data are available, and the trend seems at the moment unclear.
In brief, a sharp contraction in activity of funds entering the industry is visible worldwide. Clearly the smaller amounts of funds available for the venture capital sector and reduced possibilities for exit will lead to a sharper contraction if the correction is sustained. At the same time, it is important to maintain some perspective. Owing to the large inflows of funds in 2000 that could not be invested, there is sizeable possibility to continue financing viable projects. Moreover, because venture capital investments tend to be less liquid than traditional investments in capital markets, losses have been lower and there will be more time for venture capital investments to recover before investments are realised. Due to the deflation of the past two years, investments are much more reasonably valued than in the past and thus investors have better opportunities to achieve larger holdings in attractive companies. Furthermore, the European venture capital market, which is only about one fourth of the US market, may well have significant potential to narrow the gap. Thus, while the speculative boom that culminated in 2000 is over, it is unclear at the present juncture whether this merely marks a pause in the longer term expansion of the industry or whether it is the beginning of a structural adjustment towards a lower growth path for the industry. ... but the quality of valuations may have risen.
Notes

1. Preliminary figures for second quarter US corporate profits seem to match the numbers from the first quarter with profits down about 20 percent compared to the levels in the same quarter one year earlier.


4. The term “venture capital” is used somewhat differently in the United States and in Europe. In the United States, the expression private equity generally means all investments in unlisted equity that generally takes place through limited partnerships. Private equity is further divided into venture capital and other private equity, which usually refers to various “buy-out” or “buy-in” transactions. In Europe venture capital often means all private equity transactions.