The international environment

This article discusses developments[1] *in the international environment since the August 1998* Quarterly Bulletin*:*

- *Events this quarter have been dominated by financial market turbulence, following a debt moratorium in Russia and risks of contagion affecting Latin America. Global equity prices have fallen, and credit spreads on emerging market debt have widened.*
- *Underlying activity in the major industrial economies*[2] *except Japan remained firm in the second quarter. But subsequent falls in both business and consumer confidence pose risks for the deteriorating global outlook and growth in 1999.*
- *The Japanese economy fell further into recession, with its weakest growth since 1955. Confidence indicators remained low, and there were as yet few signs of the fiscal stimulus contributing to activity.*
- *Inflationary pressures were extremely weak in the major industrial economies, largely reflecting falls in commodity prices.*
- *The United States and Japan eased monetary policy in 1998 Q3. The prospective euro area also experienced a monetary easing, as countries with higher official interest rates reduced them. Bond yields fell in the major markets, partly reflecting a flight to quality. The Japanese benchmark bond yield fell to record low levels.*

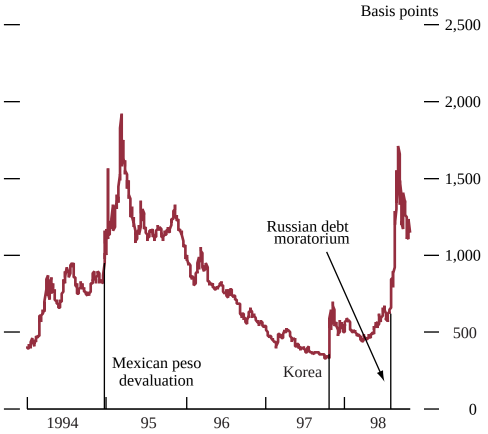
Global financial markets were affected by a series of adverse shocks during the third quarter. These resulted in a reassessment of risk, a loss of confidence in emerging markets, and sizable capital flows out of emerging economies.

In Russia, economic and political crises led the government and central bank to abandon their stable exchange rate policy and allow the rouble to float on 17 August, about one month after receiving approval and partial disbursement of their IMF loan. Shortly afterwards, a moratorium on domestic currency debt was announced. This seems to have increased market participants' perception of the risk of default on emerging market debt, and was reflected in the increase in yields on emerging market debt relative to US government debt.

Spreads on emerging market bonds were also affected by the introduction of capital controls by the Malaysian government on 1 September, as part of a scheme to protect domestic financial markets and stimulate domestic demand, which raised concerns about the convertibility of claims on emerging markets. The loss of confidence in emerging markets spread to Latin America, partly because of market concerns about the fiscal position in Brazil, but

(1) Based on data up to 31 October 1998.
(2) The major six industrial economies comprise the G7 countries minus the United Kingdom, ie the United States, Japan, Germany, France, Italy and Canada.

Chart 1
Emerging market sovereign spreads over US Treasuries



Source: Emerging Market Bond Index, J P Morgan.

also because of the region's dependence on commodity exports; dollar commodity prices have fallen by more than 20% since the start of 1997. Chart 1 shows that the average differential between emerging market government debt and US government debt rose sharply in the wake of these events, close to levels last reached during the Mexican crisis of 1994–95.

The instability in global financial markets has resulted in sizable losses reported by financial institutions on their exposures to emerging markets. The full extent of the financial sector's exposure, including exposure of, and to, hedge funds and exposures from derivatives, is not easy to establish, and constitutes a further source of potential instability in financial markets. As a result of financial instability, and the reduction in financial institutions' appetite for risk, credit conditions in many countries appear to have tightened.

Credit conditions in the United States seem to have been particularly affected. The spread of corporate bond yields over the risk-free rate widened substantially in mid October before falling back; there was also some widening of swap spreads. The Federal Reserve Board's senior loan officer opinion survey on bank lending practices showed that there had been some tightening of credit conditions in September. Banks were more unwilling to lend to large firms than in August, but the lending stance to small firms remained basically unchanged. Banks themselves generally blamed the decision to tighten on a less favourable economic outlook, industry-specific problems and a reduced tolerance for risk.

How has the recent global financial instability affected the major industrialised economies, where, with the notable exception of Japan, growth has been relatively robust since the onset of the Asian crisis last summer?

The effects of global financial instability may be transmitted through a number of channels. These can be separated into direct channels, which are concerned with trade (including trade in services), activity and price effects; and indirect channels, which include systemic concerns and changes in risk premia and capital flows (both portfolio and foreign direct investment flows).

Table A
Exports to emerging markets, end 1997

Percentage of total

	Asia	Russia	Eastern Europe	Latin America
United States	20.8	0.5	0.9	15.5
Japan	28.1	0.3	0.6	2.3
Germany	7.0	2.1	9.7	2.3
France	6.3	1.1	3.4	1.8
Italy	6.6	1.8	7.0	3.3
United Kingdom	7.3	0.8	2.8	1.3
Prospective euro area	6.0	1.6	6.4	2.1

Note: In cases where 1997 Q4 data were not available, 1996 data are given.
Asia: Malaysia, Indonesia, Thailand, South Korea, Philippines, Hong Kong SAR, People's Republic of China and Japan.
Eastern Europe: Russia, Belarus, Georgia, Poland, Czech Republic, Slovakia, Hungary, Bulgaria, Romania and Croatia.
Latin America: Argentina, Brazil, Chile, Venezuela and Mexico.

Source: IMF *Direction of Trade Statistics*.

As Table A shows, the major industrialised economies export far less to Russia than to Latin America or Asia, so the crisis in Russia will have few direct trade effects (although exports of financial services may be more affected). But 15% of US exports are to Latin America, and eastern Europe is a major export market for Germany. As capital flows to emerging markets decrease, those countries must narrow their trade deficits by exporting more or importing less from the industrialised economies. A reduction in exports to emerging markets from the major industrialised economies is likely to slow their growth next year. Events this quarter will probably put continued downward pressure on commodity prices, further reducing global inflationary pressures. Financial fragility could increase, particularly in the case of the already weakened Japanese banking system, resulting in a reduction of credit availability, increased tax burdens (from bailing out banks) and any broader financial systemic consequences following on from bank failures.

Chart 2
Japan: contributions to quarterly GDP

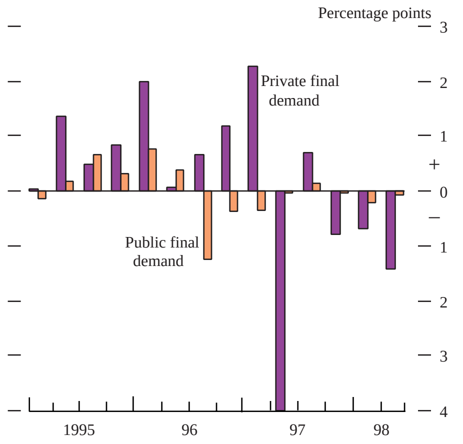
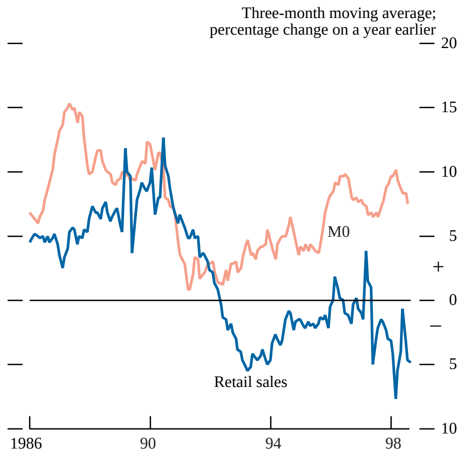
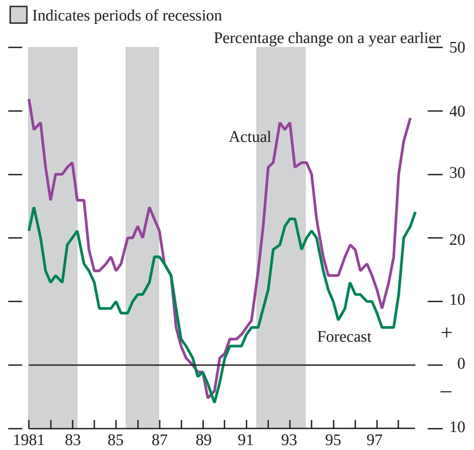


Chart 3
Japanese M0[(a)] and underlying retail sales



(a) Currency in circulation excluding banks' holdings.

Chart 4
Tankan survey: finished goods stocks—major manufacturers[(a)]



(a) Balance of manufacturers reporting excess inventories minus those reporting insufficient inventories.

One of the main reasons for the weakness in the world economy this quarter has been the deteriorating position of Japan, the world's second-largest economy.

Japanese GDP fell by 0.8% during the second quarter, its third successive quarterly fall, and Japan's worst growth performance since 1955, when GDP data were first collected. An increase in net trade failed to offset a significant deterioration in domestic demand.

There were few signs that the fiscal stimulus, implemented in May, had begun to contribute to activity. As Chart 2 shows, final public demand made a negative contribution to GDP growth in 1998 Q2, (its third consecutive contraction). The main reason for this appeared to be that local government (which accounts for more than half the spending of April's ¥7.7 trillion fiscal package on either joint projects with central government or local projects) were unwilling or unable to increase public works spending, owing to a deterioration in their own fiscal position. Indeed, the Kanagawa prefectural government announced a fiscal 'emergency' in September. Any increase in local government spending is likely to occur only after their budgets are finalised by end October. It therefore seems unlikely that public spending will have increased significantly in 1998 Q4.

Consumer confidence remained weak. Private consumption fell by 0.8% in the second quarter, more than reversing the 0.3% rise in 1998 Q1. The Nippon Institute 'index of consumer anxiety' reached its highest-ever level in August, with two thirds of respondents fearing unemployment in their family in the coming twelve months; the unemployment rate reached a record high of 4.3% in both August and September, and there were few indications that labour market conditions were improving. Employment continued to fall, owing to increasing bankruptcies and continued restructuring in the manufacturing sector.

Consumption fell during the second quarter even though employees' compensation rose by 0.3%, suggesting that precautionary saving could have risen. Chart 3 shows that the demand for currency in circulation has been growing much faster than nominal retail sales. This partly reflects the lower opportunity cost of holding more cash, given weak inflationary pressures and the low interest rate environment in Japan, but perhaps also greater fears about financial fragility. The passage of legislation to enable the recapitalisation of the banking system may be important in improving consumer confidence in the months ahead.

Weak domestic demand and export markets boosted involuntary stock levels to near-record highs. October's Tankan survey showed further falls in business confidence, with small manufacturers recording record lows. Unwanted inventories rose, though industrial production fell by 0.3% during the third quarter. In addition, the gap between actual and forecast inventory positions remains wide (see Chart 4), suggesting that firms continue to overestimate demand.

Firms have responded to the inventory problem by cutting output (and therefore labour) and by reducing investment. Investment fell by 5.5% in 1998 Q2, following a 5.2% fall in 1998 Q1. Corporate profits continued to fall, reducing the availability of internal funding. The ability of banks to continue lending was hampered by banks' need to rebuild their balance sheets, under the Prompt Corrective Action supervisory system. Indeed, the Bank of Japan's monetary easing in September seemed to be aimed at providing banks with more funding than they can on-lend.

Activity in the United States remained relatively robust in the second quarter, although there was some moderation in growth, partly due to the General Motors (GM) strike. Early indications suggest that final domestic demand continued to slow in the third quarter. Forward-looking indicators suggest that a slowdown in growth is possible, particularly if consumer spending falls as a result of equity market turbulence.

US GDP rose by 0.5% in the second quarter (see Table B), compared with 1.4% growth in the first. This reflected, in particular, a marked slowdown in the growth of inventories, in part due to the effects of the GM strike, estimated by the Bureau of Economic Analysis to have reduced GDP growth by about 0.2 percentage points. The advance GDP estimate suggests that there was some bounceback in the third quarter as GDP grew 0.8%, but that reflected stronger-than-expected net trade and stockbuilding. Final domestic demand growth halved to 0.8% from 1.6% in the second quarter.

Table B
International GDP growth

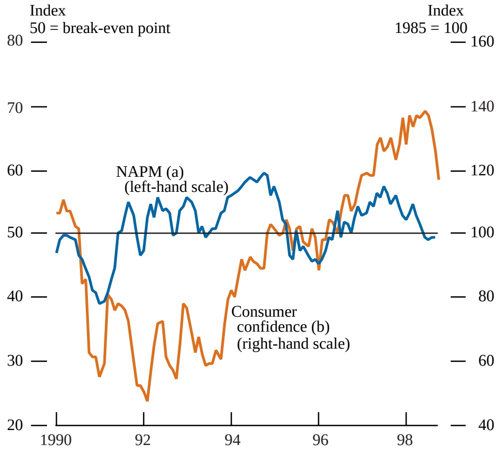
Percentage changes on previous period

	1997	1998	
	Year	Q1	Q2
France	2.3	0.6	0.7
Germany	2.3	1.4	0.1
Italy	1.5	-0.1	0.4
Prospective euro area (a)	1.6	0.8	0.5
United States	3.8	1.4	0.5
Japan	0.8	-1.3	-0.8
of which, domestic demand contributed (percentage points)			
France	0.8	1.3	0.9
Germany	1.5	1.7	0.1
Italy	2.4	0.8	0.2
Prospective euro area (a)	1.9	1.4	0.3
United States	4.3	2.0	1.1
Japan	-0.7	-0.7	-1.4

(a) The prospective euro area is approximated by GDP-weighted growth for France, Germany, Italy, the Netherlands, Spain, Finland and Belgium, which accounted for 94% of the prospective euro area's GDP.

Net trade appears to have been extremely volatile. Slower GDP growth in the second quarter was also the result of a fall in net exports, as final domestic demand growth was more robust, though slower than in 1998 Q1. Meanwhile, continued dollar strength and the weakness of Asian markets restricted exports. In July and August, export volumes fell for the first time in five years, by an average of 2.3% from a year earlier. But the advance estimate suggested that export volumes growth were not as weak as in Q2, with volumes expanding again in September.

Chart 5
US consumer and business sentiment



(a) Source: National Association of Purchasing Managers.
(b) Source: The Conference Board.

Business investment growth in the United States remained rapid, though slowed both in the second and third quarter, and the outlook for investment may be muted. Capacity utilisation remains on a falling trend. And in the four months to September (which should smooth out strike effects), industrial production fell by only 0.1%, or by 0.4% excluding automobiles. Business sentiment weakened, with the National Association of Purchasing Managers (NAPM) survey of business confidence falling below levels that would normally be associated with rising output (see Chart 5). Profits have continued to fall, with companies revising down expected earnings in the wake of lower world demand. And the fall in equity prices and increase in corporate bond yields are likely to have increased the corporate cost of capital.

Consumption remained strong, rising by 1.5% in the second quarter, and contributing a full percentage point to GDP growth. As in the first quarter, consumption was boosted by steady real income growth, as employment conditions remained buoyant, and by continued increases in equity prices.

But even though consumption was strong in the third quarter, growing by 1%, it is slowing. Consumer confidence fell in each of the four months following its June peak, albeit from a high level. The falls particularly reflect concerns about future business conditions, employment and income. The growth of non-farm payrolls slowed to 0.5% in the third quarter, a rate last seen in 1996.

Chart 6
US household borrowing and consumption

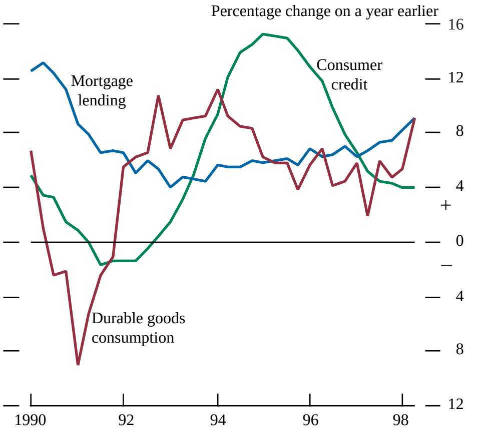
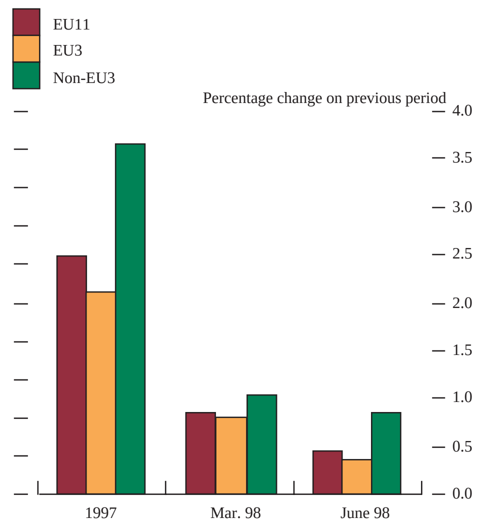
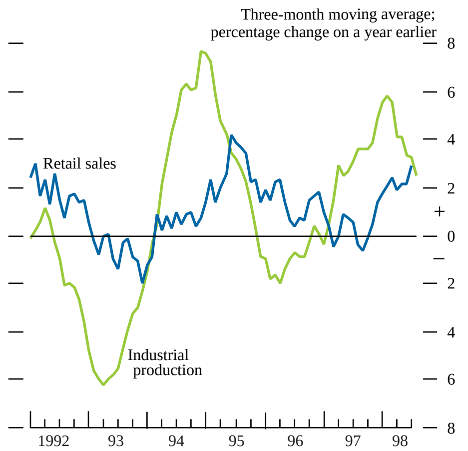


Chart 7
Euro-area GDP growth



Note: Prospective euro-area growth is approximated by GDP-weighted growth for the following countries, which account for 94% of the prospective euro area's GDP:
Non-EU3 includes Spain, Belgium, the Netherlands and Finland.
EU3 comprises Germany, France and Italy.
EU11 includes all of the above.

Chart 8
EU3 industrial production and retail sales



Continued turbulence in equity markets may also have adversely affected confidence. Perhaps owing to past increases in wealth, consumption growth has exceeded income growth in recent quarters, with the US household saving ratio falling to a level of only 0.4% in 1998 Q2. Consumption of consumer durables has typically been financed by credit card borrowing. But in recent quarters, the rise in consumption has been associated with an increase in re-mortgaging, while consumer credit growth has slowed (see Chart 6). The fall in US long-term bond yields has lowered the rates on new mortgages, and has also allowed some households to reduce their mortgage payments by re-mortgaging at lower rates. However, the continued ability of consumers to do this is limited by the scope for bond yields to fall below what are already historically low levels. Indeed, there was some rebound in mortgage rates during October. And if wealth effects are important in determining the readiness of consumers to borrow, concerns about financial markets would also limit durables' consumption growth.

Growth in the prospective euro area (EU11) slowed in the second quarter, but this largely reflected special factors in both Germany and Italy, which should have unwound during the third quarter. Growth in smaller European economies remains strong. But slower stockbuilding and falls in business confidence might reduce growth in the months ahead.

GDP in the EU11 rose by 0.5% in the second quarter, down from 0.8% in 1998 Q1.(1) However, this slowdown largely reflects special factors in Germany and Italy. German consumption and investment had both increased strongly during the first quarter, ahead of a VAT increase, so slower growth in 1998 Q2 was expected. In Italy, working-day effects reduced GDP growth in 1998 H1. Both of these factors should have unwound during the third quarter, leading to some rebound in growth, but weakening business surveys suggest that any bounceback might be muted.

Underlying growth in the prospective euro area as a whole remained strong (see Chart 7), with a bigger contribution from domestic demand in 1998. But there was a build-up of inventories in Germany and Italy over the second quarter. Both IFO and Confindustria surveys suggest that stockbuilding is unlikely to have continued to rise at the same rate. Any deceleration in stockbuilding would detract from GDP growth from 1998 Q4 onwards.

Industrial production growth slowed in 1998 (see Chart 8). That largely reflected slowdowns in Italy and Germany over the second quarter. More recently, weaker external demand in the euro area as a whole, and subdued consumption growth in Italy and Germany, have also depressed EU industrial production. In contrast, French retail sales continued to grow strongly, which helped to keep stocks at desired levels. Average French household consumption in July and August was around 3% higher than its second-quarter average.

The outlook for industrial production has weakened following problems in Russia; industrial confidence has fallen in Germany,

(1) This measure of euro-area growth is a GDP-weighted average derived from the national accounts of seven countries (see Chart 7), and is therefore partly working-day adjusted. By contrast, European GDP grew by 0.1% in the second quarter using Eurostat's harmonised GDP data, which include all eleven prospective euro-area countries and are also fully working-day adjusted.

Chart 9
EU3 employment growth

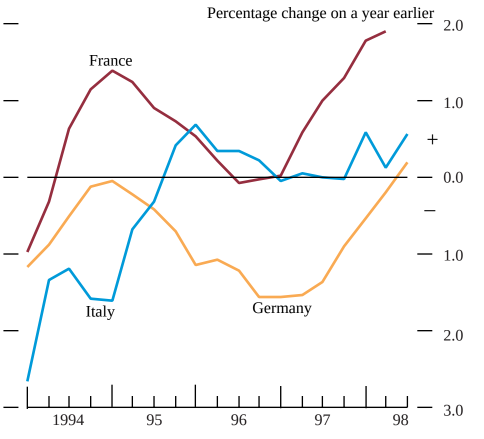


Chart 10
German government employment programmes

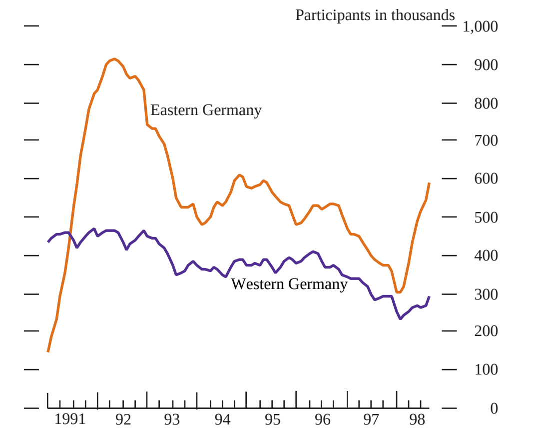
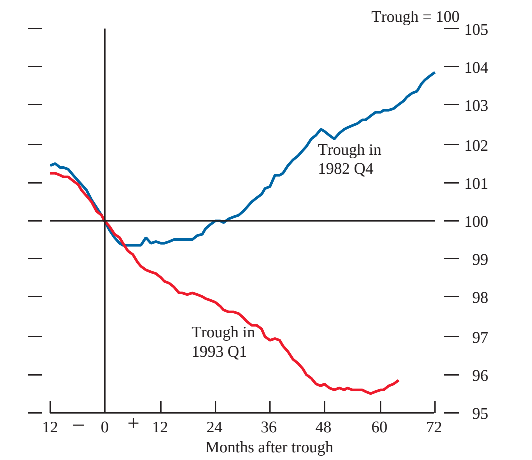


Chart 11
Western German employment after recoveries



France and Italy, albeit from high levels. The German IFO index fell to 94.0 in September, from 98.5 in July. The sub-index of business expectations (which accounts for around 50% of the total index, with the sub-index of the current business situation accounting for the other 50%) fell more rapidly than during the Asian crisis. The French INSEE survey also reflected declines in confidence, with the balance of firms expecting output to increase in the coming months falling to 6 in October, from a peak of 35 in July.

Euro-area consumer confidence, as measured by the European Commission, fell slightly in September, but remained at near-record highs. This reflected employment growth across Europe (see Chart 9), particularly in France, where consumer confidence is closely correlated with unemployment expectations. Consumer confidence in continental Europe is less likely to be depressed by financial market turbulence than in the United States, as a smaller proportion of European household wealth is held in equities. Only Italy and the Netherlands experienced significant falls in consumer confidence, based on a perceived deterioration in personal finances.

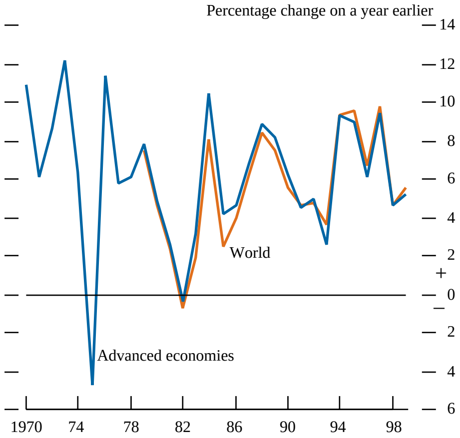
The outlook for consumption in Europe remains dependent on continued employment growth. The French economy remained in a cyclical upswing, which helped to generate a broad-based increase in employment. By contrast, the reduction in German unemployment so far in 1998 has partly reflected public employment schemes.

As Chart 10 shows, German government employment programmes were reduced in 1997, reflecting public spending constraints imposed by the Maastricht deficit criterion. But public employment schemes have increased strongly in 1998, particularly in eastern Germany, where various employment promotion and vocational training schemes increased employment by around 232,000 between December 1997 and September 1998. Adjusting unemployment data for those participating in schemes, underlying unemployment in Germany fell by only 130,000 between December 1997 and September 1998, rather than the 364,000 decline shown by the unadjusted unemployment data.

Employment growth in Germany has lagged the recovery in output. Chart 11 shows that whereas employment grew rapidly after the 1982 recession, it continued to fall for a significant period following the 1993 recession. The increase in lags between output and employment growth perhaps reflects higher labour costs. Unit labour costs increased annually by an average of 2.9% between 1980 to 1989. The annual growth rate then rose to 4.5% from 1990 to 1995, before unit labour costs peaked in 1996. Although they have subsequently fallen, German labour costs remain high compared with other euro-area countries, making companies more likely to employ capital rather than labour when expanding capacity.

German vacancies increased by 30.6% in the third quarter, relative to a year earlier, suggesting that employment growth may pick up. Combined with tax cuts, employment growth should help aggregate disposable income to increase more strongly in 1999 than in recent years. But the German economy, and especially business sentiment, remains vulnerable to external shocks, suggesting that a continued recovery in the labour market is by no means assured.

Chart 12
World trade growth (volume of goods and services)



Source: IMF *World Economic Outlook*, October 1998.

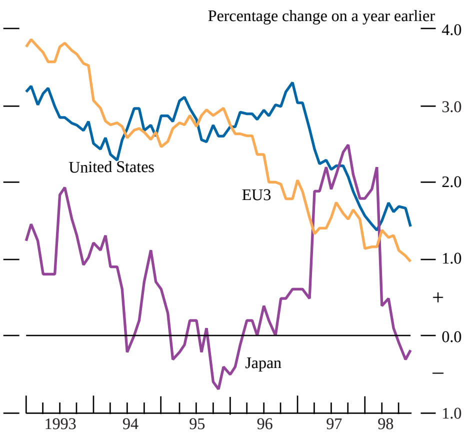
Table C
External forecasts for GDP growth

Per cent

	IMF (a)		Consensus economics (b)		*The Economist* poll of forecasters (c)	
	1998	1999	1998	1999	1998	1999
United States	3.5	2.0	3.4	2.0	3.4	1.9
Japan	-2.5	0.5	-2.5	-0.2	-2.3	-0.2
Germany	2.6	2.5	2.6	2.3	2.6	2.2
France	3.1	2.8	3.0	2.4	2.9	2.4
Italy	2.1	2.5	1.9	2.2	1.8	2.3
United Kingdom	2.3	1.2	2.5	1.0	2.3	0.8
Canada	3.0	2.5	3.0	2.1	3.0	2.1

(a) *World Economic Outlook* (October 1998).
(b) *Consensus Forecasts* (October 1998).
(c) *The Economist* (31 October 1998).

Chart 13
International CPI inflation



Although activity in the major industrial economies remained relatively robust during the second quarter, financial turbulence and resultant falls in business and consumer confidence have increased concerns about the immediate outlook.

Reflecting the deterioration in the international outlook, the IMF revised down its projections for world trade and world GDP growth in its most recent *World Economic Outlook*. World trade is expected to grow by 3.7% in 1998, a sharp slowdown compared with 1997, before rising to 4.6% in 1999 (see Chart 12). As Table C shows, the major six industrial economies are now expected to grow at or below trend in 1998 and 1999. The IMF also notes that, 'the risks to this projection, however, are predominantly on the downside ...; indeed, a significantly worse outcome is distinctly possible ...'. In aggregate, the IMF expects the seven major industrial economies to grow by 2.0% in 1998 and 1.9% in 1999 (down from forecasts of 2.3% growth and 2.2% growth in May 1998). After the United Kingdom (-0.9 percentage points), Japanese growth prospects for 1999 received the largest revision, a reduction of 0.8 percentage points from May.

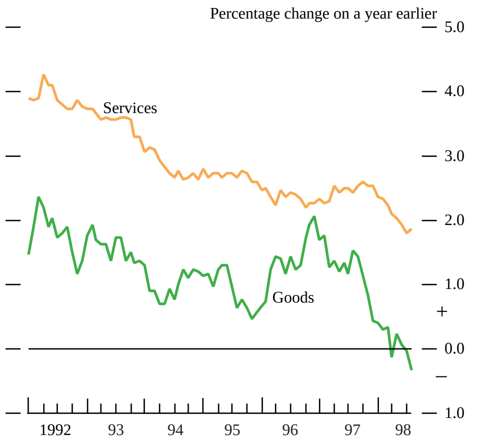
Headline consumer price inflation continued to fall across the major six overseas economies in the third quarter, as commodity price deflation persisted. Food price inflation remained reasonably strong, largely reflecting adverse weather conditions. Both goods and services price inflation continued to decline, although the gap between them widened.

Consumer prices in the six major industrial economies were on average 1% higher in August than a year earlier, down from the average 1.3% annual growth rate in the first half of the year. Weak commodity prices continued to restrain inflation, with oil prices remaining around record lows. However, adverse weather conditions increased food price inflation. Annual inflation within the EU3 (Germany, France and Italy) declined further, and was just above 1% (see Chart 13), somewhat lower than annual rates of harmonised inflation for the prospective euro area as a whole (around 1.2%). The difference in inflation rates reflects much stronger activity in some of the smaller EU countries.

Goods prices in the major industrial countries, excluding Italy (and the United Kingdom), were lower in the twelve months to August (see Chart 14), while services prices rose by around 2%. The wedge between goods and services prices has widened. That might partly reflect lower commodity and hence input prices, as well as currency appreciation feeding through into goods prices. As non-tradables, services prices are far less influenced by international factors. Further, wages are a more significant cost for services industries, and there are few signs that wage growth has slowed. US non-farm average hourly earnings rose by 4.1% in 1998 Q3. Wage growth also picked up in both Germany and France. Wage growth appears limited only in Japan, where bonus and overtime payments, which account for a significant portion of total income, have fallen.

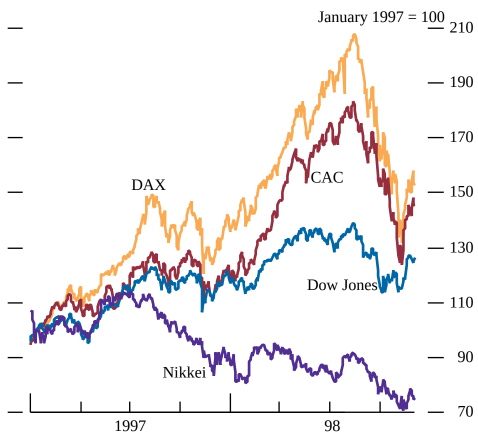
There is deflation in Japan, where both consumer and producer prices were lower in September than a year ago. Even measured consumer prices, which overstate inflation, fell by 0.2% in the year to September. Domestic wholesale prices were also weak, falling by 2%. Yen weakness restrained deflationary pressures by lifting

Chart 14
M5 goods and services inflation[(a)]



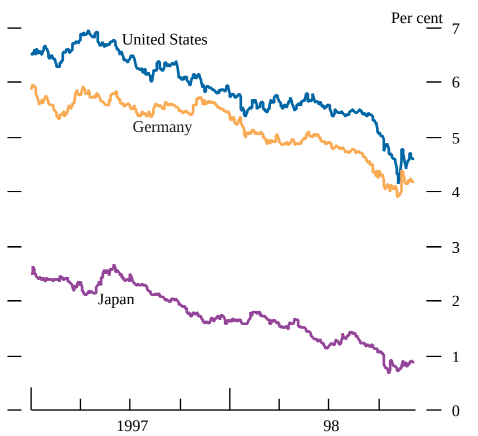
(a) GDP-weighted average of the United States, Japan, Germany, France and Canada.

Chart 15
Equity prices[(a)]



(a) In local currencies.

Chart 16
G3 ten-year bond yields



import prices and limiting the effect of falling commodity prices; and broad money growth was positive in the third quarter, suggesting that a deflationary spiral might not fully emerge.

Currency, bond and equity prices were more volatile.[(1)] *Equity prices in the United States and major European markets fell significantly from their July peaks, before rebounding following interest rate cuts in industrialised economies. The Japanese market continued on its downward trend, begun in 1991.*

Equity prices (in local currency terms) in the major European markets fell by more than 30% between the 17 July peak and early October, but then recovered somewhat, ending around 20% lower by end October. In contrast, the Dow Jones Industrial Average, which appeared to be losing momentum earlier in the year, fell by more than 18% from July to its September low, but was only 10% lower by end October (see Chart 15). The bulk of the equity price fall occurred in response to the Russian crisis and fears of financial market contagion. But with the exception of the Nikkei (which fell by 33%), equity prices in major markets were still above their end-1997 levels. So to date, only the rise in equity prices in the first half of 1998 has unwound. The limited nature of the fall in equities prices suggests that, with the exception of Japan, the decline in household wealth from equity price falls should not be a major constraint on consumption.

Any reduction in equity prices normally reflects a combination of three factors: a downward revision to expected corporate earnings; an increase in the equity risk premium; or an increase in the risk-free rate. The equity risk premium, the expected return on equities over and above the risk-free rate, is usually thought of as being driven by two factors—risk aversion and uncertainty. It is difficult to disentangle exactly the relative importance of each, but implied volatility derived from S&P 500 index option prices for March 1999 increased by around one third between 14 August and early October, suggesting that uncertainty had increased. Since then implied volatility has reduced somewhat.

A further explanation of recent financial asset price movements was changes in market liquidity. Chart 16 shows that yields on all G3 ten-year bonds fell in August, perhaps partly reflecting expectations of looser monetary policy in response to a slowdown in activity. But yields on the most liquid of these, US government bonds, fell by more. Further, as Alan Greenspan, chairman of the US Federal Reserve, pointed out in a speech to the National Association for Business Economics on 7 October, there was a differentiation in yields between US Treasury bonds with different liquidity. Normally, 'on the run' US Treasury issues (ie those that have just been issued) yield between 3 to 5 basis points lower than 'off the run' (immediately preceding) issues, even though the two bonds are of similar maturity. During October, that spread widened substantially, suggesting that the liquidity premium had increased. The US corporate bond market, which is more illiquid than the government bond market, experienced an even larger increase in yield spreads.

Possibly reflecting concerns about the emergence of a deflationary spiral and increasing pessimism on the economic outlook, the

(1) See 'Markets and operations', pages 301–13.

benchmark Japanese government bond yield fell to a series of record lows, closing at 0.715% on 2 October before recovering.

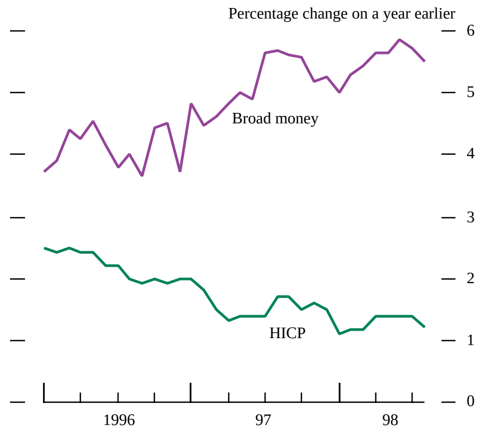
The annual rate of broad money growth remained robust in the major industrial economies.[1] *Narrow money growth slowed between June and August in all major industrial economies, with the exception of Japan.*

Real annual broad money growth reached its highest level in the 1990s at 4.4% in June. Broad money velocity (and, to a lesser extent, narrow money velocity) has, however, fallen over the past year.

Narrow money growth fell in all major industrial economies except Japan between June and August. As discussed earlier, high rates of Japanese narrow money growth (around 8% relative to a year earlier) are consistent with an increased preference for cash. This reflects greater financial fragility and the low opportunity cost of holding cash, not strong nominal demand. Broad money growth remained more subdued.

The Governing Council of the European Central Bank (ECB) announced its future monetary policy strategy on 13 October. The ECB has defined price stability quantitatively as 'a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%'. Price stability is to be maintained over the medium term. The ECB assigned a prominent role to broad monetary aggregates, in parallel with a 'broadly based assessment of future price developments'.

Chart 17
Euro area HICP[a] and broad money growth[b]



(a) Source: Eurostat.
(b) Source: Bank estimate.

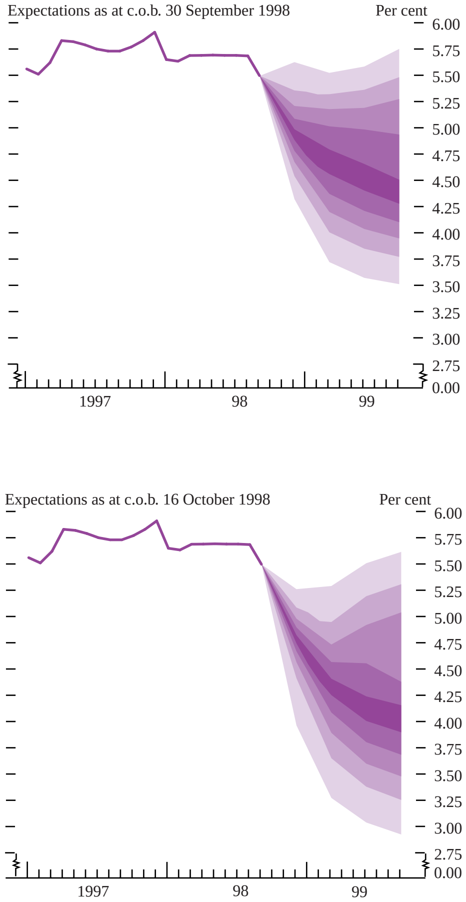
Chart 17 suggests that both inflation and monetary data appear benign. HICP annual growth in the prospective euro area as a whole remained at 1.2%, well within the target ranges. Annual broad money growth picked up to 5.6% in the second quarter, and continued to grow at that rate in the first two months of 1998 Q3. This is above the average 5.1% growth rate in 1997, but with activity slowing in the major European countries, there are few signs that the pick-up in money growth presages increasing inflationary pressures. The benign inflationary outlook explains why short-term interest rates are now expected to converge on current German official interest rates of about 3.3%, rather than the market expectation of 3.5% implied by three-month euromark futures during August. The reduction in official interest rates as the rest of Europe converges on 3.3% rather than 3.5% would imply an effective easing of around 50 basis points for the euro area as a whole.

US, Canadian and Japanese monetary authorities eased policy in September. Within Europe, the picture was more mixed. Some prospective euro-area monetary authorities also eased monetary policy, while some EU members not participating in the first wave of monetary union raised official interest rates in order to ease market pressure on their currencies.

The Bank of Japan (BoJ) guided the overnight call rate down by 25 basis points, to 0.25% on 9 September. While the official discount rate remained unchanged (giving the BoJ scope for a further interest rate cut if necessary), the reduction in the call rate

(1) As measured by the GDP-weighted average of broad money growth in the major industrial economies.

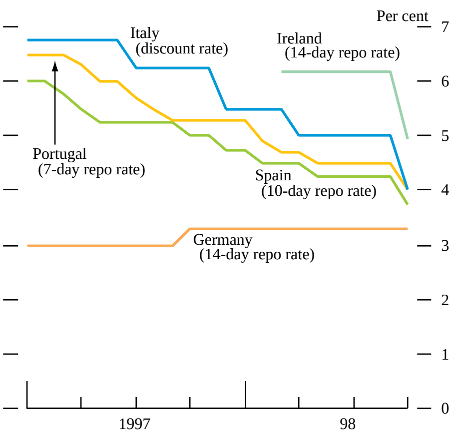
Chart 18
Implied distribution for three-month eurodollar interest rates



Source: CME and Bank of England.

The chart depicts the probability distribution for short-term interest rates, and is rather like a contour map. So at any given point, the depth of shading represents the height of the probability density function implied by the markets over a range of outcomes for short-term interest rates. The markets judge that there is a 10% chance of interest rates being within the darkest, central band at any date. Each successive pair of bands covers a further 20% of the probability distribution until 90% of the distribution is covered. The bands widen as the time horizon is extended, indicating increased uncertainty about interest rate outcomes.

Chart 19
European official interest rates



should reduce banks' funding costs and so help to offset a credit crunch.

The US Federal Reserve Bank lowered the federal funds target rate by 25 basis points to 5.25% on 29 September, and by a further 25 basis points to 5% on 15 October. The US rate cuts reflected increasing concerns about the global economy and its impact on US credit conditions. Both reductions were quickly followed by the Bank of Canada, which reduced its bank rate by 50 basis points, to 5.25%. Those rate cuts partly reversed the 100 basis point tightening in August (which had been necessary to protect the Canadian dollar from market pressure).

Chart 18 shows how the implied risk neutral probability distribution of short-term interest rate expectations, derived from options, in the United States changed, following the second reduction in official interest rates. Previously, the deepest purple band, which shows the outcome considered most likely by financial markets, suggested a continued monetary easing by the Federal Reserve Board. The mean expectation of three-month interest rates was for a 40 basis point fall by December 1998 and a further 50 basis point fall by September 1999. However, following the 15 October rate cut, market expectations of interest rate levels were revised down considerably and general uncertainty increased. The mean expectation of three-month interest rates at September 1999 fell by a further 35 basis points, with rates falling sharply at first, then declining modestly throughout the period. There is a significant expectation that three-month rates could fall below 4% by September 1999, and virtually no expectation that interest rates will increase.

Within Europe, monetary policy has been influenced by participation in the single currency. While German official rates remained unchanged, monetary policy in countries with higher official interest rates (Italy, Ireland, Spain and Portugal) was eased, as interest rates continued to converge towards a single European interest rate. As Chart 19 shows, there has been a steady convergence since 1997. Italy, which has experienced some of the highest nominal rates in the prospective euro area, lowered official interest rates by 1 percentage point on 27 October as inflationary pressures remained weak and concerns about the 1999 budget receded. Interest rate movements in Denmark, which is outside the euro area, were more volatile. Interest rates increased by 100 basis points in September, owing to downward pressure on the currency. That rise was partly reversed in October, as rates were lowered first by 25 basis points, then by a further 10 basis points.

The monetary policy easing by a number of advanced economies in September and October should support economic activity in these regions, against the headwinds of lower world trade and financial market volatility. The outlook for the world economy deteriorated in the period under review, and prospects remain uncertain. But there were some positive developments at the end of the period. The bank rescue package implemented in Japan in mid October may help to restore the banking system to a sounder footing and bolster confidence. And the IMF package for Brazil, together with the measures announced after the general election, seems to have stabilised the situation in Latin America. These developments restored some measure of stability to the world economy at the end of a turbulent three months.