

Crucial Role of Monetary Policy in Economic Upturn

The last 12 months have seen substantial rises in short-term interest rates in the euro area. Monetary policy thus adopted a restrictive stance. However the external value of the euro fell sharply during the same period. Overall the monetary conditions in the euro area are currently neutral; in other words they are not a barrier to growth equal to the expansion of potential output. Due to moderate wage growth, further interest-rate increases are not necessary, despite the sharp rise in the price of oil, which is leading temporarily to higher inflation. Inflation rates will decrease again next year in the EMU countries. The European Central Bank (ECB)'s recent interventions in favour of the euro on the foreign exchange market are a signal with which the ECB supports the turnaround in the euro exchange rate expected on the basis of the economic fundamentals. If there really is a substantial appreciation of the euro, the ECB should immediately decrease interest rates again in order not to jeopardise economic growth, for a sustained upturn is necessary if the continuing high rates of unemployment in the EMU countries are to be reduced significantly.

Since the early November of last year the ECB has raised the refinancing rate in seven steps by a total of 2.25 percentage points to currently 4.75%. Three-month money market rates have risen to 5%, while lending rates have also increased perceptibly. By contrast, the yield on ten-year government bonds in the EMU countries – which had already risen in the first three quarters of 1999 by over 1.5 percentage points – has remained more or less stable since autumn of last year (cf. figure 1).

While the ECB's first interest-rate increase in November 1999 was in reaction to the ending of the Asian, Latin American and Russian crises and their consequences, the subsequent four steps were due to generally more positive growth forecasts for the euro zone and the continuing ample availability of liquidity indicated by the strong expansion of M3. The ECB's main justifications for the last two interest-rate increases (by a total of half a percentage point) were the increased risks to price stability posed by continuing high oil prices – which were still rising then – and the significantly lower external value of the euro.

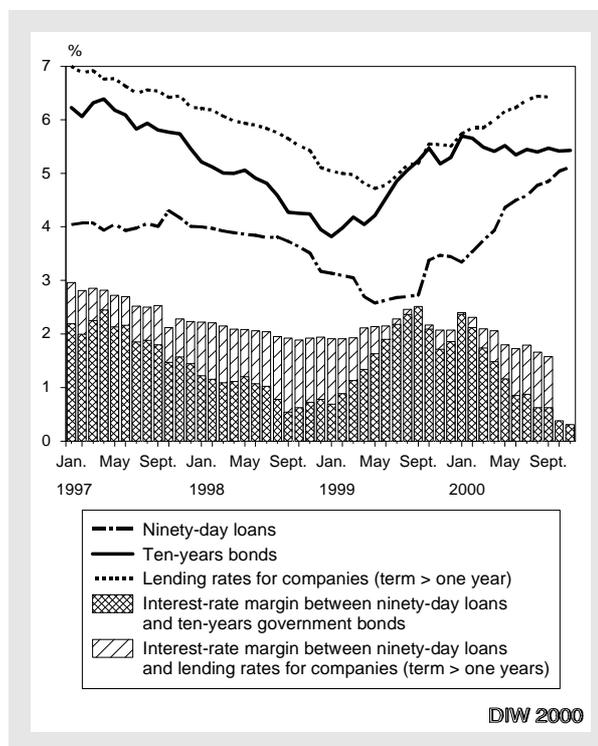
Given the overall substantial increase in base rates, we must ask whether the ECB has reacted appropriately to the new economic parameters. This inquiry also entails the question of whether the current monetary

policy stance should be classed as neutral, expansive or restrictive, and which type of monetary policy is appropriate to the goal of maintaining price stability in the current situation. It must be borne in mind that the trend for short-term interest rates, which are greatly influenced by the ECB, is not in line with the movement of the euro exchange rate, and that there is thus a discrepancy between the effects of monetary policy in the narrow sense and the effects of the monetary conditions as a whole.

Restrictive monetary policy

It is not the level of nominal but of real interest rates – adjusted for the inflation rate – that is decisive for the effects of interest-rate policy on the propensity to take on debt and invest. Real interest rates are usually classified and assessed on the basis of long-term averages. However, the values used here are not the aggregated

Figure 1
Selected Interest Rates and Interest-rate Margins in the Euro Area
January 1997 to November 2000¹



¹ November 2000: Average for the first 15 days. Lending rates only until September 2000.
Sources: ECB; Eurostat; DIW calculations.

Table 1
Long-term Comparison of Real Interest Rates

	Germany			USA			Euro area
	1975-1999	1985-1999	1990-1999	1975-1999	1985-1999	1990-1999	Nov. 2000
Ninety-day loans ¹	3.0	3.5	3.4	2.8	3.0	2.3	3.7
Ten-year government bonds ²	4.3	4.6	4.3	3.5	4.2	3.7	3.9
Interest-rate margin ³	1.2	1.1	0.9	0.7	1.2	1.3	0.3

1 Germany: rate of interest on ninety-day loans in Frankfurt minus rate of change of cost-of-living index; USA: rate of interest on ninety-day eurodollar loans in London minus rate of change of consumer price index (CPI); EMU countries: interest on three-month euribor minus rate of change of harmonised consumer price index (HCPI) excluding energy, foodstuffs, tobacco and alcohol. — 2 For both Germany and the USA deflated by the centered 25-month average rate of change of the consumer price index (cost-of-living index or CPI); deflated for the EMU countries by the longer-term inflation forecast, quantified here as 1.5% in accordance with the ECB's implicit inflation target. —

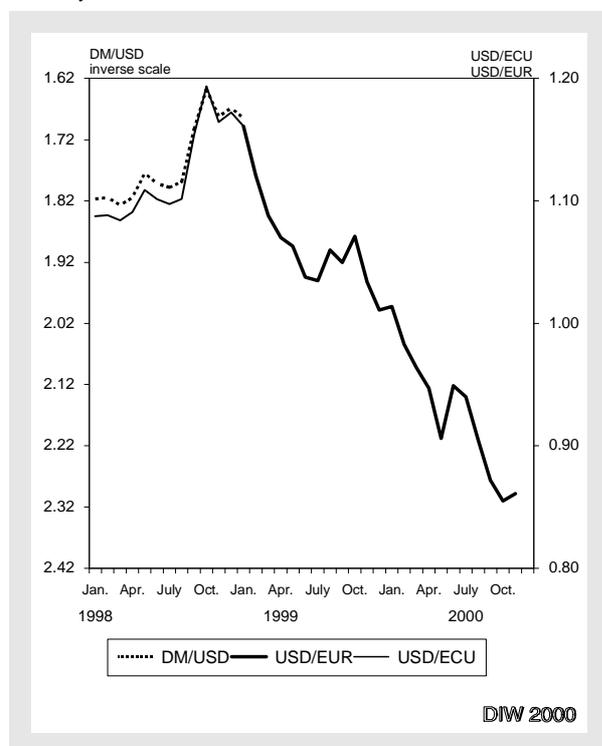
3 Yield on ten-year government bonds minus interest on ninety-day loans.

Sources: Bundesbank, ECB, Federal Reserve Board, DIW calculations.

averages of today's EMU countries – because these contain distortions due to risk premiums and exchange-rate expectations – but German and U.S. interest rates, the latter having been accompanied by much stronger growth. At 3.7%, short-term real interest rates in the

euro area are currently slightly higher than the corresponding long-term average for Germany, and significantly higher than the average for the USA (cf. table 1). At 0.3 percentage points, the gap between long-term interest rates – measured as interest on ten-year government bonds – and money market interest rates is at an historically low level. However, ten-year government bonds seem to be subject to special factors, which in turn affect the interest-rate differential. The falling interest rates in this area are probably the result of spillover effects from the lower supply of ten-year government bonds in the USA due to the debt reduction taking place there, but also of the reduction of budget deficits in the euro area. Thus, the yields on government bonds with a remaining maturity period of three years, for example, have increased over the last year, unlike the yields on government bonds with a remaining maturity period of ten years, so that the margin between short-term and long-term interest rates has narrowed much less. The high short-term interest rate, compared with the long-term average, indicates a more restrictive monetary policy stance, while the low interest-rate differential also suggests that market participants expect weaker growth and thus reduced interest rates. All in all, current interest-rate policy is likely to be exerting a dampening effect on economic growth.

Figure 2
Exchange Rate Between USD and D-Mark and Between USD and ECU/EUR
January 1998 to November 2000¹

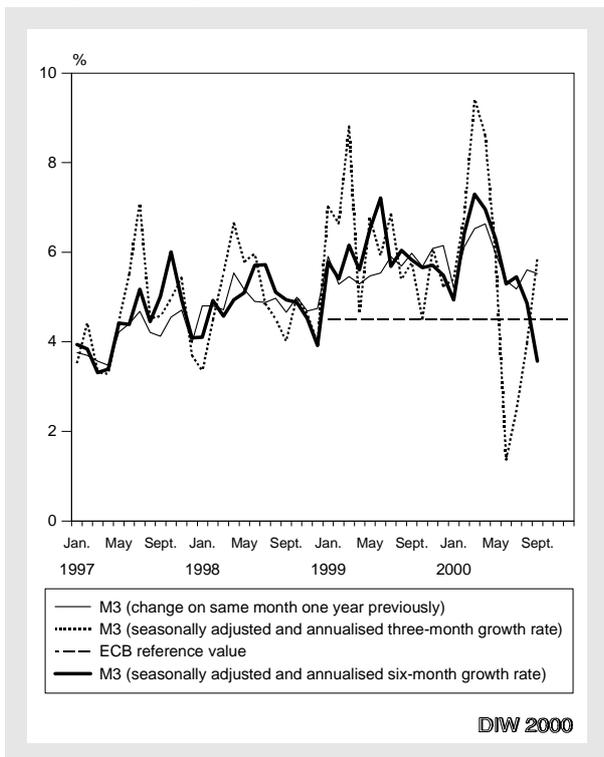


¹ November 2000: Average for the first 15 days.
Sources: ECB; DIW calculations.

The exchange rate, by contrast, is currently having a strong expansive impact on growth. Since its introduction, the euro has depreciated by a total of 26% against the US dollar; in real effective terms, the external value of the euro has fallen by 19% (cf. figure 2).¹ In the course of this year alone, the euro depreciated by 15% against

¹ Weighted real rate of exchange against the currencies of 39 partner countries, calculated in accordance with the figures published in the ECB's monthly bulletins.

Figure 3
M3 in the Euro Area
 January 1997 to September 2000



Sources: ECB; DIW calculations.

the US dollar, or by 10% in real effective terms. The result is a strong boost for exports and a sharp rise in import prices, diverting demand towards domestic products.

Moderate money supply growth

The expansion of M3 has weakened markedly. After an extremely sharp increase in the first quarter of the year, the average monthly increase on 1999 has fallen to 5.5%, while the average, seasonally adjusted and annualised increase over the last six months has fallen to a low 3.6% (cf. figure 3). The ECB uses an annually defined reference value to assess the increase in M3. At present this reference value is 4.5%, the sum of 1.5% for the increase in the harmonised consumer price index (HCPI), 2.25% for the trend increase in GDP and 0.75% for the trend decline in the income velocity of money.²

While the growth of M3 compared to last year still exceeds the reference value by around one percentage point, there is no cause for concern from the point of view of stability policy, for a number of reasons:

The ECB is currently unable to distinguish between owners of money market funds who are resident in the euro area and those who are not.³ Money market funds which belong to non-residents are not really a component of M3 and currently probably slightly exaggerate the liquidity available in the euro area.

Due to the oil-price shock, the HCPI exceeds the ECB's implicit inflation target by around 0.8 percentage points this year. Because this price jump is unavoidable, slightly stronger money growth will ensue owing to the increased domestic transaction demand for money.

Output potential was under-utilised at the beginning of the third phase of European Monetary Union. If this situation is to be rectified, the trend increase in GDP used to calculate the reference value will have to be exceeded. This means exceeding the reference value, unless it is viewed as desirable at the same time to achieve a lower inflation rate than the implicit target of 1.5%.

The 2.25% increase in trend potential-output growth assumed for the euro area is low compared with other calculations. The International Monetary Fund, for example, estimates a 2.5% increase in potential output in the euro area.⁴

The income velocity of M3 declined in the 1990s to a greater extent than accounted for in the ECB's reference value. The ECB carries out its calculations on the basis of the values from the periods 1980 and 1999 and 1992 to 1999. If, however, the period from 1991 to 1999 is used, the trend decline in the income velocity of M3 amounts to an annual average of around 1.3% (cf. figure 4).⁵

The ECB stresses that the reference value does not represent an intermediate monetary policy goal. 'Rather, the reference value acts as an analytical and presentational tool which constitutes an important benchmark for assessing risks to price stability.'⁶ In the past even

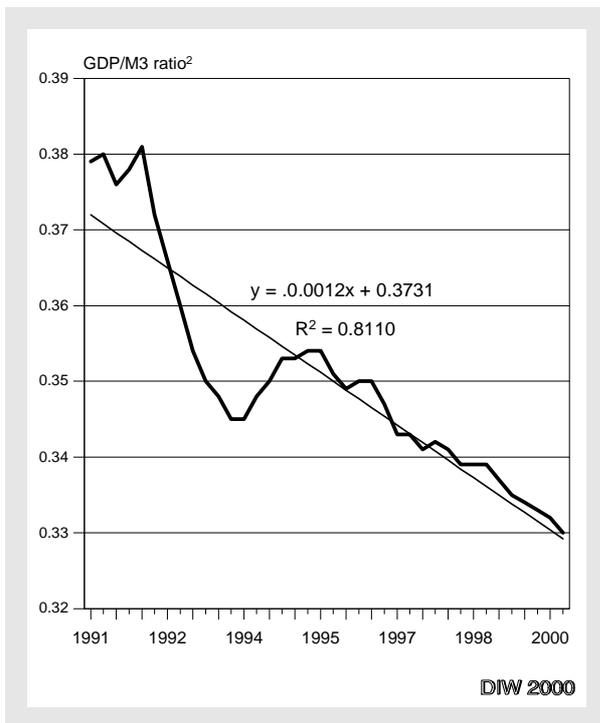
² The values given here have been calculated on the basis of the margins for the individual rates published by the ECB. These amount to a maximum 2% for the increase in prices, 2% to 2.5% for the trend increase in GDP and 0.5% to 1% trend decline in the velocity of money; cf. ECB, *Monthly Bulletin*, December 1999, pp. 11f.

³ Cf. ECB, *Monthly Bulletin*, October 2000, p. 13.

⁴ Cf. International Monetary Fund (2000): *Staff Report on the Monetary and Exchange Rate Policies of the Euro Area; Supplement Updating Information on Recent Economic Developments and Policies in the Euro Area; Supplement on EU Trade Policies; Public Information Notice Following Consultation; Two Statements by Representatives on the IMF Executive Board for France, on Behalf of Euro Area and EU Members*. IMF Staff Country Report No. 00/146, November 2000, p. 8. By contrast, numerous econometric studies have estimated secular growth of 2.25%; cf. ECB, *Monthly Bulletin*, October 2000, pp. 42 ff. However, these calculations are heavily influenced by the weak growth in the 1990s.

⁵ DIW calculations based on ECB figures. Cf. 'The World and the German Economy in Autumn 2000'. *Economic Bulletin*, 11/2000, pp. 343

Figure 4
Income Velocity of M3 in Euro Area
Actual change and trend¹ I/1991 to II/2000



1 Linear approximation according to ordinary least square method. — 2 Quarterly values for nominal GDP in relation to average stock of M3 in the same quarter. The series on which the calculation is based are seasonally adjusted, the figures for M3 are calculated on the basis of the index series provided by the ECB.

The quarterly gradient of -0.0012 corresponds to an annual change of -0.0046 . The latter implies an average annual decline in the income velocity of M3 of around 1.3%.

Sources: ECB; Eurostat; DIW calculations.

the Bundesbank has accepted both small and large deviations from its money supply targets when these were not considered a risk to future price stability.⁷

The ECB will review the reference value in December 2000, but is not expected to revise it, even though the assumptions regarding both the trend decrease in the income velocity of money and the trend rate of economic growth would justify an upward adjustment. The annual trend decrease of 1.3% in the velocity of circulation in the 1990s suggests that this component of the reference value should be quantified at 1.25% instead of the current 0.75%. The resulting reference value would

⁶ Cf. ECB, *Monthly Bulletin*, November 2000, p. 41.

⁷ Cf., for example, B.S. Bernanke, I. Mihov (1997): 'What does the Bundesbank target?' *European Economic Review*, 41, 6, pp. 1025-1053; O. Issing (1997): 'Monetary Targeting in Germany - The Stability of Monetary Policy and of the Monetary System'. *Journal of Monetary Economics*, 39, pp. 71 f.; L.E.O. Svensson (1999): *Monetary Policy Issues for the Eurosystem*. Seminar Paper No. 667, Institute for International Economic Studies, Stockholm University, p. 8.

be 5%.⁸ One reason for not adjusting the reference value as regards the income velocity of money might be that the ECB expects a turnaround in the trend because, for example, increasing monetary stability in Central and Eastern Europe is curtailing the role of the D-Mark as a parallel currency in this region or because electronic payment methods are resulting in a reduced need for transaction funds in the EMU countries. In the case of trend economic growth, the ECB will presumably prefer to wait for clear signs of a higher trend growth rate before carrying out an adjustment. However, in that case it would be wise to take these uncertainty factors - which currently imply higher, stability-oriented money supply growth - into consideration in analysing the money supply trend and to accept overshooting of the reference value, to avoid any unnecessary curb on prospects for growth in the euro area.

Euro undervalued

The appreciation of the euro - expected for some considerable time now by many analysts - has failed to materialise. In fact the euro has depreciated further, especially against the US dollar. This development was once again due in large part to the surprisingly strong growth in the USA. Instead of the widely expected slow-down, economic activity in the USA accelerated again at the beginning of this year. Average growth of 5.3% can be expected this year, compared with 3.3% in the euro area. As long as there is no sign of the US economy slowing down significantly, investment in dollar assets will increase because - at least in the short term - the yields are higher (cf. figure 5). However, the US economy recently weakened perceptibly, and if this trend continues - as is expected⁹ - international investors will expect the dollar to depreciate and will thus invest more in assets denominated in euro. A significant recovery of the euro would then be likely. The USA's balance of payments deficit of 4% of GDP, for example, and the inflation rate in the USA (which is around one percentage point higher than in the euro area) (cf. figure 6) also suggest that the euro is currently undervalued in relation to its medium-term equilibrium value.¹⁰

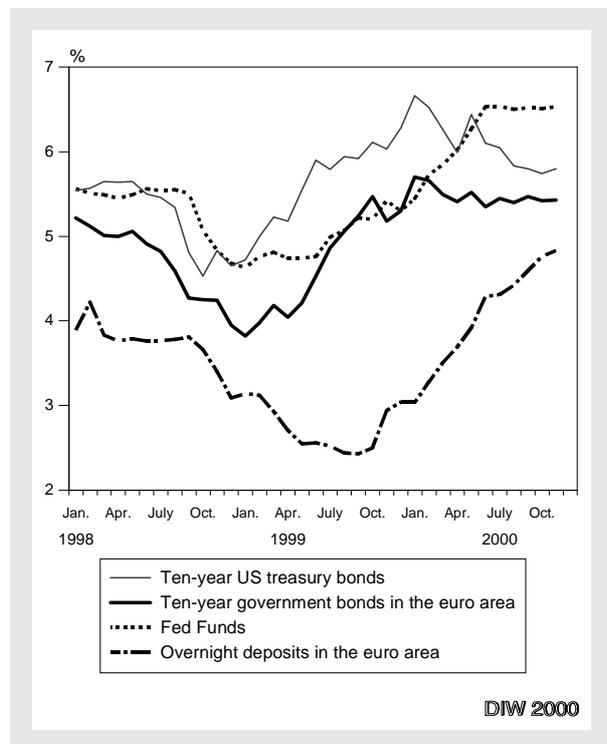
However, past experience has shown that exchange-rate adjustments do not come about gradually, but rather in sudden leaps and bounds. One reason is a type of herd behaviour common among investors, which means that individuals prefer not to deviate too sharply

⁸ The Six Institutes have proposed such an adjustment; cf. 'The World and the German Economy', loc. cit. p. 361.

⁹ Cf. 'The World and the German Economy', loc. cit. pp. 338.

Figure 5
Interest Rates for Overnight Deposits
and Ten-Year Government Bonds in the Euro
Area and the USA

January 1998 to November 2000¹



¹ November 2000: Average for the first 15 days.
Sources: ECB; Eurostat; Federal Reserve Board.

from the behaviour of the other investors in order to protect their reputations.¹¹

The degree of correction of the exchange rate and the related adjustment reactions depend on how badly the euro has been undervalued. There will also be a proportionately higher risk of destabilisation of the world economy owing to the rise in inflation which can then be expected in the USA, the damage to the stock markets and the increased uncertainty of market participants regarding the future. In addition, if the depreciation of

¹⁰ The International Monetary Fund recently stated that the euro is undervalued by more than 30% against the US dollar; cf. International Monetary Fund, loc. cit. p. 16. The German Council of Economic Experts cites several studies in its report for this year, which also point to a significant undervaluation of the euro; cf. Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung: Chancen auf einen höheren Wachstumspfad. Jahresgutachten 2000/01, Ziffern 350 ff. Also cf. ECB, *Monthly Bulletin*, November 2000, pp. 31 ff.

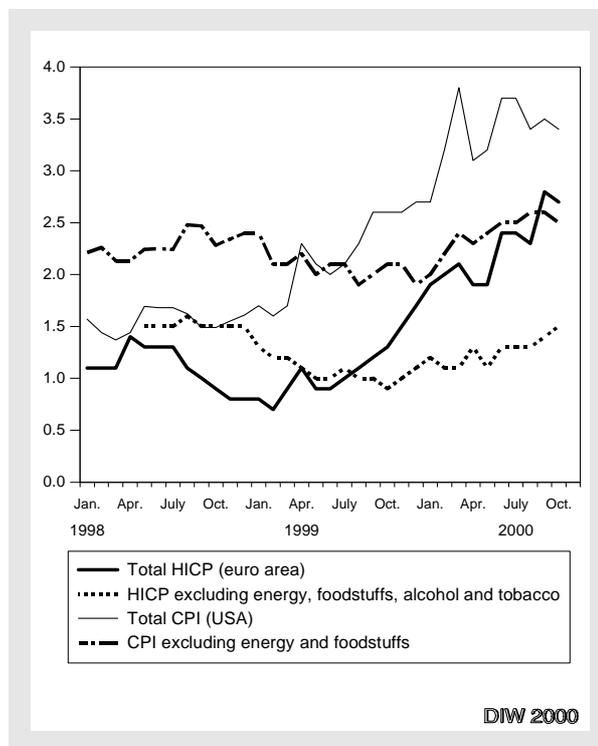
¹¹ For a discussion of herd behaviour on the financial markets cf., for example, S. Bikhchandani, S. Sharma (2000): *Herd Behavior in Financial Markets: A Review*. IMF Working Paper, WP/00/48.

the dollar were to be too severe, growth would weaken significantly in the euro area. The ECB's attempt up to the summer to use interest rates as an instrument to stabilise the exchange rate is not likely to succeed because it will hamper the reduction of the growth differential between the euro area and the USA, while in the worst case it could even lead to a further devaluation of the euro.

On the other hand, the ECB's recent interventions on the foreign exchange market are to be welcomed given the expected medium-term appreciation of the euro. The ECB has thus indicated that it expects an appreciation and has made a gesture that investors who have invested in US dollars will have to take into consideration if they do not wish to suffer losses. While the ECB cannot set appreciation in motion by intervening on the foreign exchange market, these interventions can help to prevent further depreciation and can intensify a potential appreciation. The timing of the last series of interventions was cleverly chosen in that the euro had just gained in value again as a result of the weak third quarter in the USA (cf. figure 7). Although concerted inter-

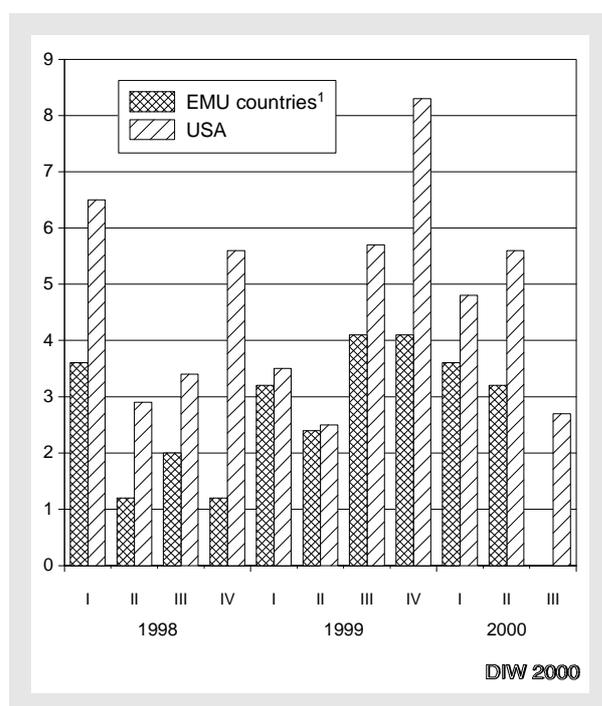
Figure 6
Consumer Price Indices
in the Euro Area and the USA

January 1998 to October 2000
% change on previous year



Sources: Eurostat; U.S. Department of Labor.

Figure 7
Real GDP in the EMU Countries and the USA
 % change on previous quarter (annualised rate)



¹ III/2000 not yet available.
 Sources: Eurostat; U.S. Department of Commerce; DIW calculations.

vention by the ECB and the US Federal Reserve would be more effective than an individual move on the part of the ECB, because the Fed has unlimited means for intervention at its disposal in the form of its own currency, there is little risk of the ECB having shot its bolt too soon, given its high currency reserves and also because the central banks in the USA and Japan can be expected to adopt a supportive role again if necessary.¹²

No risk of inflation

The internal value of the euro is still stable. Although inflation has increased, especially with the sharp rise in oil prices, the oil-price hausse has now passed its peak. The rate of inflation in the euro area should be much lower from spring 2001 onwards because the base effects of the oil-price rise will gradually attenuate this year and because oil prices are likely to decline. However, a further slight increase in the core inflation rate is

¹² There has already been a joint intervention by the central banks, on 22 September 2000; cf. ECB press release of 22.9.2000.

to be expected because the higher energy costs are likely to be passed on in the prices of most products.

Whether the oil-price rise will dampen economic growth in the future depends to a large extent on the behaviour of the collective bargaining parties and the ECB. The ECB has rightly declared that it will not accommodate a battle over income distribution. The expected continued moderate wage growth in the euro area indicates that the oil-price shock will remain a one-off effect and not lead to a wage-price spiral, as happened after the oil-price crises of the 1970s. Thus, the conditions for further economic expansion with a reduction of the continued high level of unemployment are still favourable, despite the oil-price increase. The ECB should not tighten the monetary policy reins further as long as workers accept the reduction in real wages made necessary by the oil-price increase. German trade unions have a particular responsibility here, because German wage settlements, given Germany's importance in the euro zone, are likely to set an example for the other countries. The ECB could have avoided the most recent interest-rate increases without endangering price stability if it had realised and emphasised in time that the oil-price shock would not lead to accelerated inflation but to a one-off price thrust that does not require restrictive monetary policy as long as the bargaining parties do not make additional pay demands.¹³ As soon as there is a noticeable appreciation of the euro, the ECB should immediately reduce interest rates in order to avoid restrictive overall monetary conditions and to facilitate a sustained upturn.

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¹³ This link is stressed only in the ECB's last two monthly bulletins – the emphasis was previously on the risk to price stability. Thus, the ECB wrote in November: 'In order to support the maintenance of price stability over the medium term, it is important that economic agents accurately perceive the nature of current price developments. In particular, it needs to be recognised that current upward pressures can be overcome most smoothly if economic agents see them for what they are, namely one-off or temporary price increases resulting from external factors.' Cf. ECB, *Monthly Bulletin*, November 2000, p. 7. Previously, by contrast, the 'concerns of upward risk to price stability' were stressed. Cf. ECB, *Monthly Bulletin*, September 2000, p. 6.