IV. Monetary policy in the advanced industrial countries

Highlights

Monetary policy-makers in the two largest economies continued to face sharply different cyclical conditions during the past year. In the United States, the main question was whether the Federal Reserve should tighten policy; given considerable uncertainty about the degree of excess demand and continuing low levels of inflation, however, it was decided not to do so. By contrast, in Japan short-term rates remained unchanged at exceptionally low levels under the influence of a sizable infusion of liquidity by the Bank of Japan. In the course of the fiscal year ending in March 1998 the Government announced new measures, including the commitment of public funds, to support the financial system.

Economic developments in the countries that will participate in European economic and monetary union (EMU) were also characterised by significant cyclical differences, but continued inflation and interest rate convergence (see also Chapter II). The fact that short-term interest rates must reach a common level by the time of the establishment of EMU in January 1999 is increasingly influencing actual interest rates. The convergence process has enabled the authorities in Italy, Spain and Portugal, where interest rates have been above the average level for the EMU area, to relax monetary policy. In Ireland, Finland and the Netherlands, which are at a more advanced stage of the cycle and where monetary conditions have been tightened, the convergence of short-term interest rates at low levels raises inflationary risks. In a number of countries with explicit inflation targets, interest rates also had to be raised to pre-empt a build-up of inflationary pressures.

The decline in inflation witnessed in many countries in the 1990s has been accompanied by a marked increase in the transparency of monetary policy. This development arises from the desire for increased accountability that has gone hand in hand with the greater independence of many central banks. It should also make monetary policy more effective by helping to build the central bank's reputation and by allowing financial markets to play an equilibrating role.

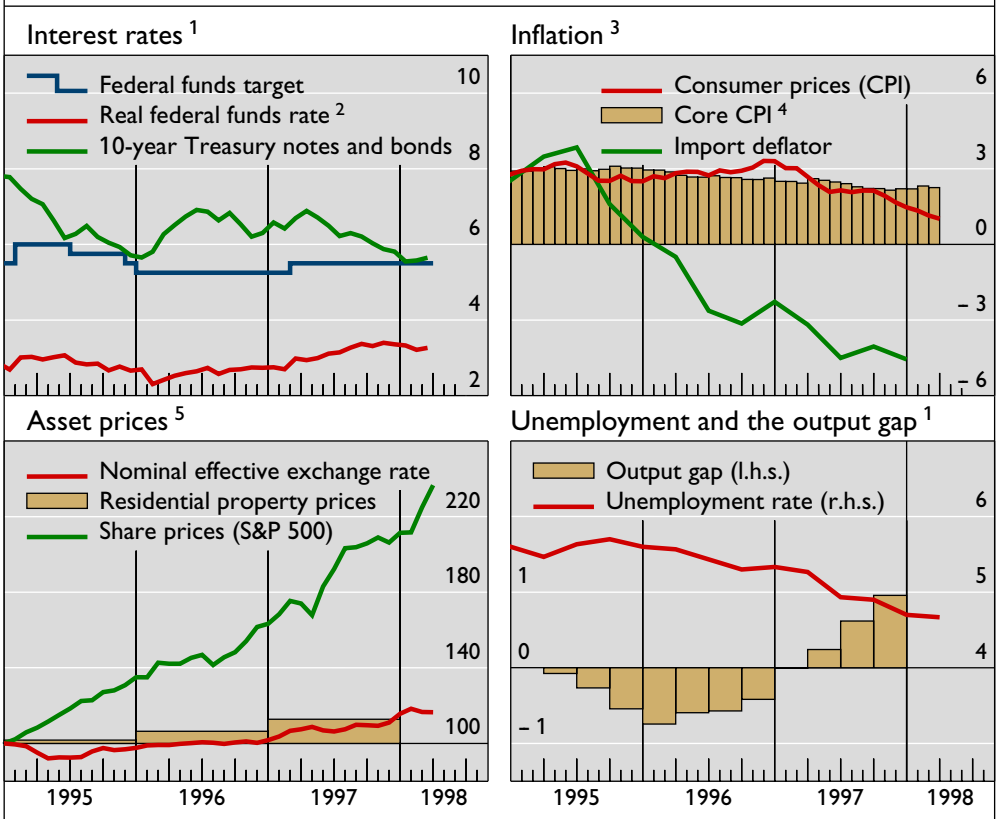
Monetary policy in the United States

The Federal Reserve has faced a dilemma in setting monetary policy in the past year. While several indicators pointed to a risk of rising inflation and a need for tighter policy, other factors suggested that the stance of policy did not need to be changed.

Falling unemployment …

The most important factor pointing to the need to tighten policy was the continued fall in the unemployment rate to a level below that which in the past had been associated with rising wage pressures. However, in addition to labour

Economic indicators for the United States



[1] In percentages. [2] Federal funds rate deflated by 12-month changes in core CPI. [3] Annual percentage changes. [4] CPI excluding food and energy. [5] End-1994 = 100.

Sources: OECD and national data. Graph IV.1

market conditions, the near-term prospects for inflation can also be influenced by such factors as energy and import prices, non-wage labour costs and changes in the degree of internal and external competitive pressures. Unemployment rates below the NAIRU (non-accelerating inflation rate of unemployment) may thus temporarily be compatible with stable inflation. Furthermore, it was considered possible that the NAIRU itself had shifted downwards in response to behavioural and other changes in labour markets. The Federal Open Market Committee therefore took the view that the tightness of labour markets did not necessarily signal an imminent rise in inflation.

… and rising equity prices suggested a need for tighter policy …

A second consideration suggesting a potential need for monetary restraint was the continued rise in equity prices, which risks leading to excessive growth in consumption. However, while rising asset prices increase wealth, consumer spending should in principle respond only to the extent that households perceive this increase as permanent. Since stock prices are volatile, equity price changes may be discounted by consumers, particularly in the short run. Residential property prices, which are much less variable in the short term and which may therefore influence permanent wealth perceptions more directly, rose only moderately last year. Thus, it could be argued that the rise in stock prices may overstate the likely effects of wealth changes on aggregate demand.

… while declining inflation and the Asian crisis suggested otherwise

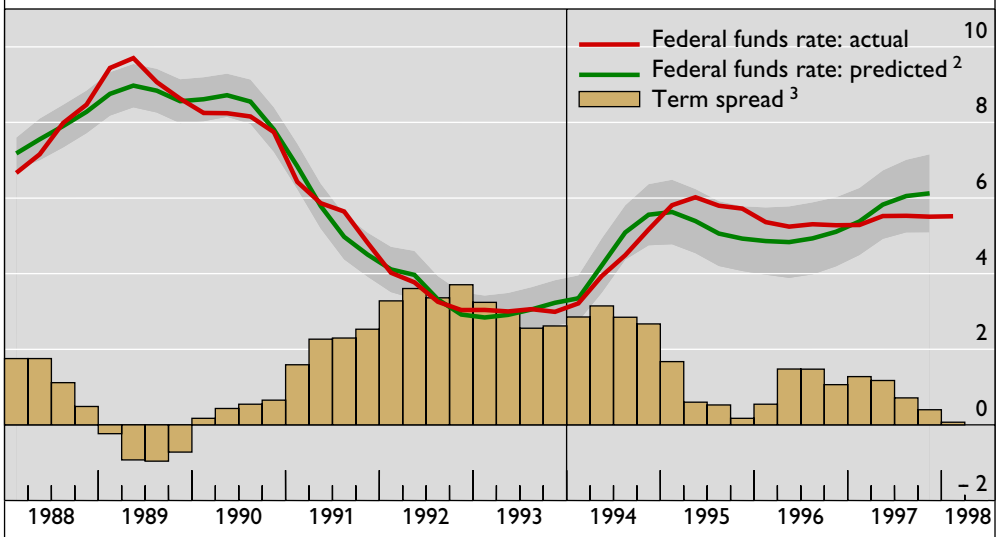
While falling unemployment and rising stock prices might have pointed to a need for tighter monetary conditions, other factors suggested that the stance

of policy remained appropriate. Chief among these was the fact that inflationary pressures, as measured by a range of indices, continued to ease: core inflation slowed from 2.5% in the first quarter of 1997 to 2.3% a year later and headline CPI inflation from 2.9% to 1.5% over the same period. To the extent that these declines were influenced by the appreciation of the dollar and the weakness of oil and other commodity prices, inflationary pressures could, however, increase in the medium term should these temporary forces abate or reverse. The economic turmoil in Asia will also exert a dampening effect on global inflation through lower import demand and commodity prices, which also suggested that a further tightening of policy would be unwarranted.

In the end, policy was left unchanged

Balancing the arguments for and against a tightening of monetary policy, and noting as well that real interest rates have risen as inflation rates have declined (Graph IV.1), the FOMC opted to leave the federal funds rate at the level set in March 1997. In assessing the stance of policy in the United States last year, it should also be borne in mind that both the nominal and the real federal funds rate rose sharply in 1994 when pre-emptive policy measures were taken to prevent inflation from accelerating. This tightening led to a period of monetary restraint, as evidenced by a flattening of the yield curve, and resulted in a slowdown in real growth in 1995 and in inflation in 1996–97. More interestingly, out-of-sample predictions from a simple reaction function estimated on data ending in 1993 indicate that, following the pre-emptive policy tightening, the federal funds rate in 1995 and 1996 was on average almost 60 basis points above the level predicted by the state of the economy and the FOMC's past behaviour (Graph IV.2). From late 1996 onwards, however, the predicted value of the federal funds rate rises rapidly in response to the buoyant economy. Despite the increase in interest rates in early 1997, the predicted values rise above the actual federal funds rate.

Dynamic forecasts of the federal funds rate [1]



[1] Out-of-sample forecasts using a reaction function fitted on data from 1988 Q1 to 1993 Q4; the vertical line indicates the end of the estimation period. [2] The shaded area marks the 80% confidence band. [3] Ten-year government bond yield less the federal funds rate (actual).

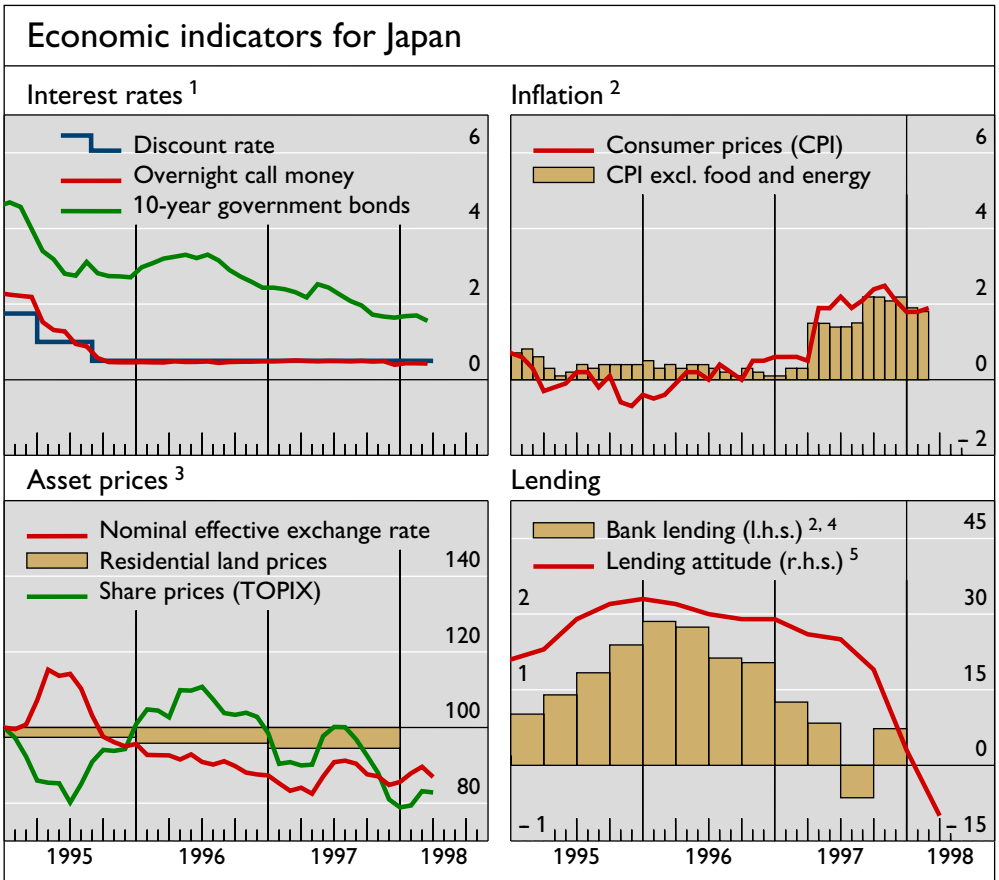
Sources: National data and BIS estimates. Graph IV.2

Monetary policy in Japan

Economic activity in Japan fell sharply in the second quarter of 1997 and stagnated thereafter, resulting in a contraction in GDP of 0.25% over the year to the fourth quarter. The main factors underlying the weakness in activity were the consumption tax increase in April 1997, reduced public spending and mounting uncertainty regarding the stability of the financial system. The sluggishness of the economy was also reflected in the low rate of CPI inflation, which, adjusted for the tax change, was essentially zero for the year, and bond yields fell to the lowest level ever recorded.

Concerns about credit risks …

In November, following the failures of several financial institutions, serious concerns arose about credit risks in the interbank market. In response, the call-money rate rose sharply above the discount rate, the "Japan premium" – the spread between interest rates quoted by Japanese and non-Japanese banks in the euromarkets – increased, and the yield on Treasury bills, which are essentially free from credit risk, fell. To bring the call-money rate back to a level below the discount rate, which has been kept at 0.5% since 1995, the Bank of Japan provided ample liquidity. The counterparts on the liabilities side of the Bank of Japan's balance sheet have been a sharp increase in currency in circulation, and a highly unusual build-up of banks' excess reserves. This suggests that concerns regarding



[1] In percentages. [2] Annual percentage changes. [3] End-1994 = 100. [4] To the non-financial private sector. [5] Of financial institutions; percentage balance of positive and negative answers.

Sources: Bank of Japan Short-term Economic Survey ("Tankan") and national data. Graph IV.3

the stability of the financial system and, possibly, the development of a Keynesian liquidity trap may have played a role.

With prices essentially flat, negative real short-term interest rates are not achievable. The Bank of Japan has therefore experienced difficulties in relaxing monetary conditions sufficiently to promote growth. These problems have been exacerbated by the strong headwinds stemming from widespread weaknesses in the financial sector and balance-sheet problems elsewhere in the economy, which have tended to limit the effectiveness of monetary policy.

… and credit rationing …

During the past year there have been growing indications of credit rationing becoming increasingly severe. This is evidenced by the "Tankan" survey (Graph IV.3), which shows that corporate borrowers perceived the lending attitude of financial institutions as becoming more restrictive despite the unprecedentedly low level of policy-controlled interest rates. At the same time, lending growth has declined noticeably.

Several factors have constrained the willingness and ability of Japanese banks to lend. The most important is the large stock of non-performing loans left over from the bubble period. Writing off such loans erodes capital ratios and reduces the capacity to lend. A second such factor has been the continued weakness of equity prices following the onset of the Asian crisis. Since banks have hitherto been able to count part of their unrealised gains on listed securities as capital, declining stock prices tighten capital constraints. In response, banks may have readjusted their asset portfolios away from corporate loans towards assets subject to lower capital requirements. A third factor which may have reduced the supply of loans is the "Big Bang" reforms to be implemented between 1998 and 2001. These reforms will heighten competitive pressures among banks and tighten regulatory standards. Since financially stronger banks will have a competitive advantage in the new environment, the reforms provide an incentive to all banks to apply more disciplined lending standards.

… led to measures to resolve financial sector problems

A number of measures have been announced to deal with the deep and persistent problems in the financial sector. The rules governing the valuation of banks' property assets – many of which were acquired well before the sharp rise in property prices in the 1980s – were changed to allow them to be valued at current market prices. Banks will also be permitted to value their equity holdings at either market or book value, which will exempt them from writing off any losses incurred on their holdings of securities. Moreover, public funds amounting to ¥30 trillion will be used to recapitalise the Deposit Insurance Corporation and banks. Finally, the policy of "prompt corrective action" became effective in April 1998 and will apply to all banks, except some banks operating domestically which will be exempted for one year. These measures, together with steps to increase transparency with respect to banks' loan losses and some indications of a greater willingness to close weak banks and non-banks, are to be welcomed in view of the need to reduce uncertainty regarding the stability of the financial system.

Monetary policy in the EMU area

Different cyclical positions

Cyclical positions in the countries that will participate in the establishment of EMU in January 1999 – Austria, Belgium, Finland, France, Germany, Ireland, Italy,

Luxembourg, the Netherlands, Portugal and Spain – still differ noticeably despite the considerable convergence that has been achieved with respect to inflation and bond yields. The narrowing of yield spreads has been influenced significantly by the interaction of fiscal consolidation and growing expectations that EMU would start with a broad membership.

Over the last year policy-determined short-term interest rates have also continued to converge, with rates tending towards those in Germany. This is desirable for Italy, Spain and Portugal. However, in the Netherlands, Ireland and Finland, such convergence is raising the risk that inflationary pressures might increase.

Germany, France, Belgium and Austria

Expansions strengthened

Economic conditions in Germany, France, Belgium and Austria remained broadly similar in 1997 (see also Chapter II). The expansion in Germany strengthened relative to 1996, although the momentum slackened in the course of the year. Real growth accelerated in France, Belgium and Austria. While this led to some closing of the output gaps in the four countries, they remained substantial, particularly in France.

While still subdued, inflation rates in the four countries tended to diverge. Inflation in Germany, as measured by the all-German CPI, rose modestly, owing largely to the weakness of the exchange rate and the associated increases in import prices, and to higher administered prices. By contrast, in France, Belgium and Austria headline inflation fell to a very low level. In response to the price pressures developing, the Bundesbank raised the repurchase rate in mid-October from 3.0%, an all-time low, to 3.3%. The tightening was followed by interest rate increases in Austria, Belgium and France, which were judged desirable given the upswing in economic activity in these countries and which also served to contain exchange rate pressures within the ERM.

Ireland, Finland and the Netherlands

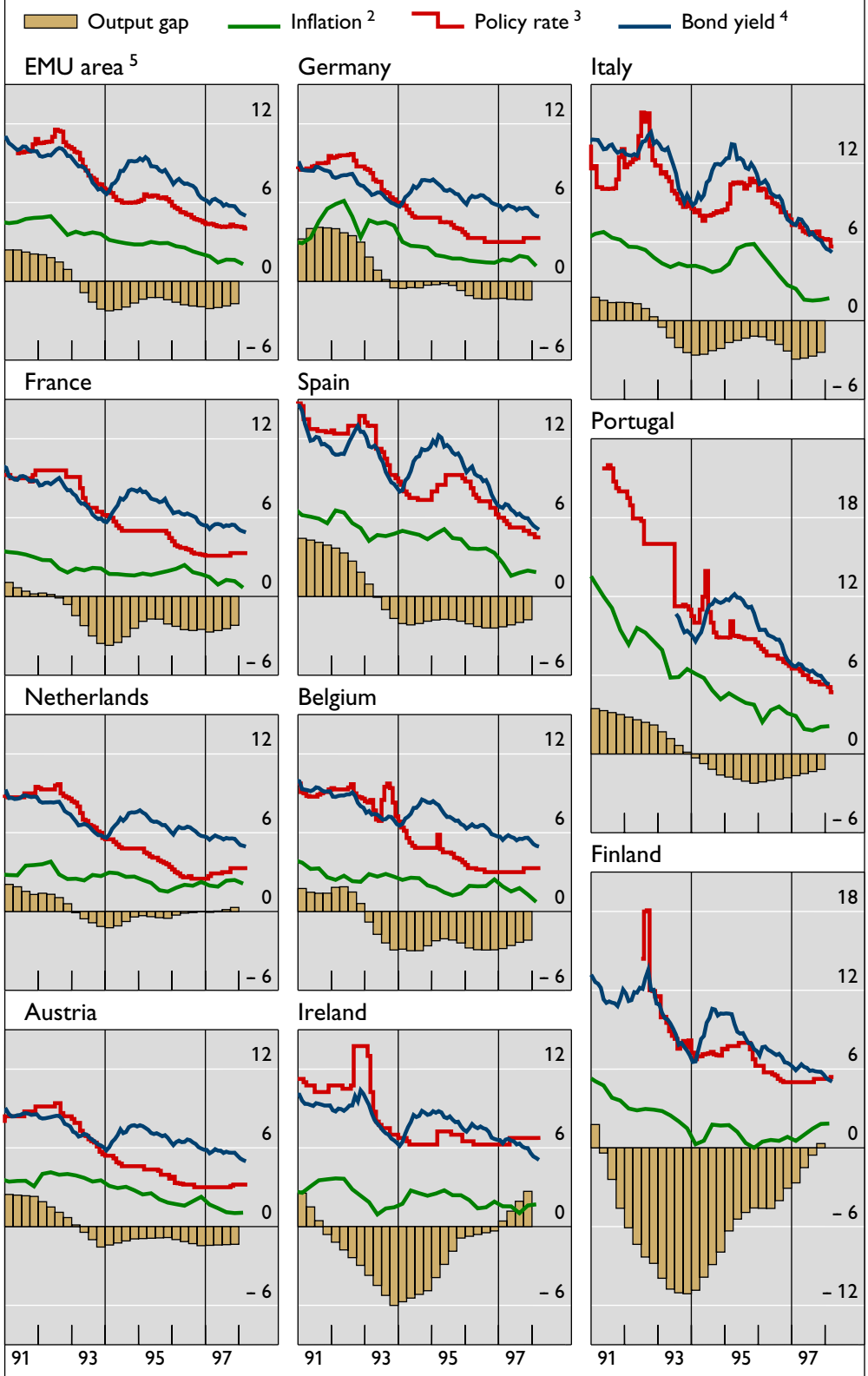
Strong growth and need for tighter policy

Economic developments in Ireland, Finland and the Netherlands, which are all at an advanced stage of the cycle, illustrate the kind of situation that could arise under EMU if asymmetric real developments were to occur. With real GDP growth in 1997 reaching 10.3% in Ireland, 5.9% in Finland and 3.0% in the Netherlands, and concerns that headline inflation would rise, policy-makers in all three countries faced the need for more restrictive policies than were appropriate in France and Germany.

Monetary policy was tightened in Ireland in May last year in the light of the rapid upswing in activity and rising asset prices. Then in March 1998 the central parity of the Irish pound was revalued by 3% within the ERM. In the Netherlands, where inflation rose during the summer and autumn of 1997 owing to increased price pressures from abroad, policy was tightened in March, July and October, the policy rate being raised from 2.7% to 3.3%. The Bank of Finland tightened policy in September 1997 and again in March 1998 as the risk of an acceleration of inflation increased given the depreciation of the markka in trade-weighted terms and the rapid closing of the output gap.

Output gaps, inflation and interest rates in the EMU countries [1]

In percentages

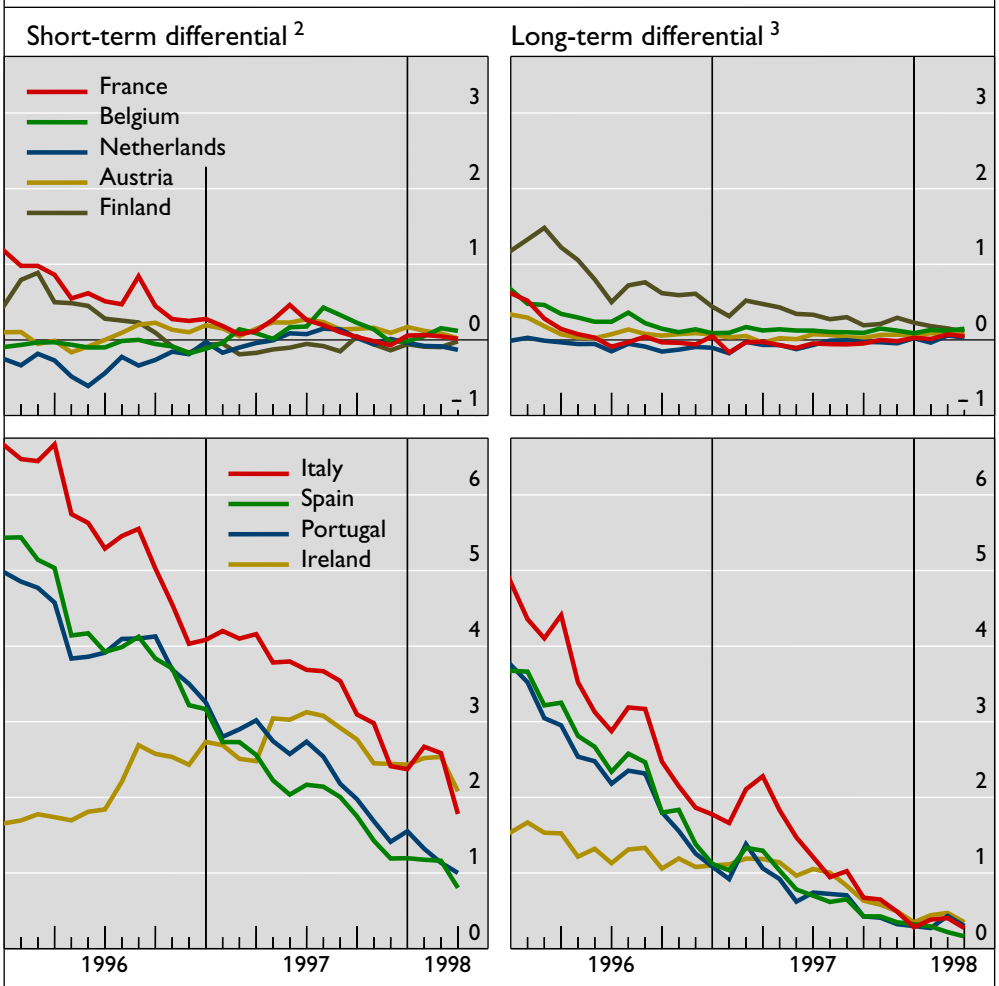


[1] Excluding Luxembourg. [2] Four-quarter change in consumer prices (national definitions). [3] For Ireland, short-term facility rate; for Portugal, intervention rate; for Finland, liquidity credit rate; for the other countries, see Table IV.1. [4] Representative government bonds (usually ten-year). [5] Weighted average, based on 1990 GDP and PPP exchange rates.

Sources: OECD and national data. Graph IV.4

Convergence in the EMU countries [1]

In percentage points



[1] Excluding Luxembourg. [2] In three-month rates, vis-à-vis German rates. [3] In government bond yields, vis-à-vis German yields.

Source: National data. Graph IV.5

Italy, Spain and Portugal

Declining interest rates and falling inflation

In contrast, the downward convergence of short-term interest rates was welcomed in Italy, Spain and Portugal, where interest rates had been maintained at high levels to facilitate the transition to EMU by reducing inflationary pressures and ensuring exchange rate stability, but where output gaps had remained significant. With CPI inflation falling sharply, and with long bond yields declining commensurately, short-term rates could be reduced considerably in all three countries. The gradual relaxation of monetary conditions that has taken place in the last few years has provided a significant boost to their economic growth. Thus in Italy year-on-year growth in the fourth quarter of 1997 reached 2.8%. The recovery was similarly strong in Portugal and Spain, where growth rates exceeded 3% in 1997. Output gaps, however, remained sizable.

Policy issues in the run-up to EMU

The decision taken in early May 1998 to proceed with the establishment of EMU raises several practical questions regarding the conduct of monetary policy. One issue stems from the fact that, while inflation rates are broadly similar among the prospective EMU members, output gaps and the stance of monetary policy still differ considerably between countries (Graph IV.4). Since short-term interest rates must converge to a common level in January 1999, much policy attention will be devoted to choosing the appropriate level for the European Central Bank's policy rate.

Another question relates to the choice of the monetary policy strategy to be pursued by the ECB. Given the possibility of transitional complications immediately after the formation of EMU, policy may initially need to be conducted in a rather eclectic manner. A final consideration concerns how transparent the ECB should be in conducting policy. These issues are discussed further below.

Setting monetary policy

Graph IV.5 shows that short-term interest rates have broadly converged in seven of the 11 EMU countries. However, in Ireland, Italy, Portugal and Spain, short-term rates are still between 100 and 200 basis points above those elsewhere in the EMU area.

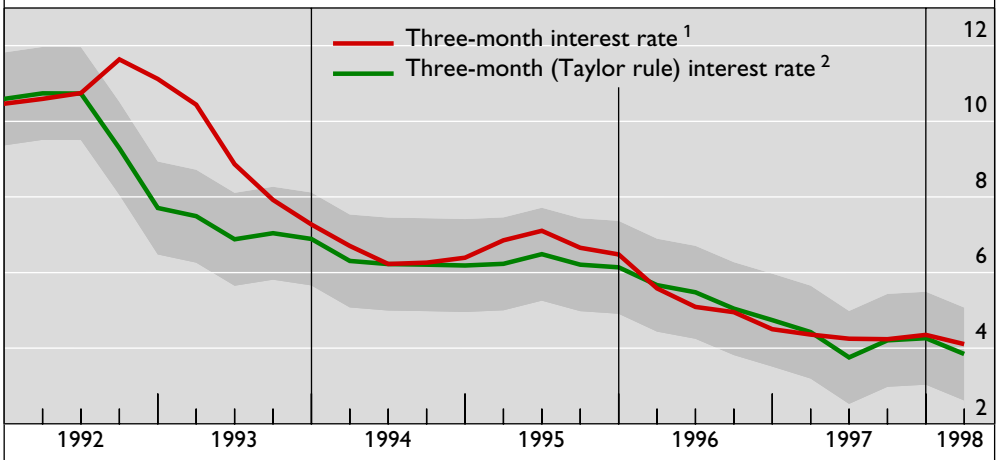
To illustrate the problem of setting a single EMU-wide short-term interest rate, Graph IV.6 shows a GDP-weighted average of three-month interest rates in the EMU area. At the end of 1997, this average stood about 0.7 percentage points above levels in the countries with the lowest interest rates. A hypothetical EMU-wide interest rate is also included. This interest rate is derived from a "Taylor rule", which assumes that monetary authorities raise interest rates whenever output is above potential and/or inflation is above their inflation objective. The interest rate is computed using the GDP-weighted output gap and CPI inflation for the EMU area shown in Graph IV.4, and assumes an estimated equilibrium real interest rate of 3.55% (see Graph IV.6, footnote 2) and an inflation objective of 2%. With the exception of the period around the ERM turmoil in 1992–93, the counterfactual and the actual GDP-weighted short-term rates are close, and stood at about 3.8% in the first quarter of 1998. This suggests that, given the average output gap and inflation rate in the EMU area, if the ECB's repurchase rate was set at the level in the countries with the lowest rates in the spring of 1998, it would be clearly below that suggested by the Taylor rule. There are, however, at least two reasons why this exercise may overestimate the appropriate level of short-term rates in the EMU area.

A "Taylor rule" …

… may overestimate the appropriate level of interest rates

First, although the relatively high interest rates in Italy, Spain and Portugal reflect the need to control inflationary pressures, they are also indicative of a desire to avoid unwelcome exchange market developments. Following the selection of the initial EMU members in May 1998, it is likely that interest rates can be reduced in those countries with little risk of exchange market volatility. The average EMU-wide interest rate in the graph may therefore underestimate the extent to which interest rates can approach those in the countries with the lowest rates.

Interest rates in the EMU area: actual rate and rate implied by the Taylor rule



[1] Weighted average of three-month interest rates in the EMU member countries (excluding Luxembourg). [2] The Taylor rule assumes that the inflation objective is 2% and that the equilibrium real interest rate is 3.55%, which was estimated by regressing realised three-month real interest rates against the average rate of exchange rate depreciation vis-à-vis the Deutsche mark, using data for 13 European countries for the period 1982-97. The equilibrium real interest rate equals the fitted value assuming no depreciation. The shaded area marks the 80% confidence band, computed using the standard error on the fitted value.

Sources: National data and BIS estimates. Graph IV.6

Secondly, in judging the appropriate level of short-term rates, it should be recognised that inflation rates have remained very low, and that the ECB may enjoy greater credibility than individual central banks may have done in the past. Since higher credibility reduces the importance the public attaches to current economic conditions when forming inflation expectations, and increases the weight it attaches to the central bank's long-term inflation objective, nominal interest rates may be able to fall without any danger of reigniting inflation. If so, it would be appropriate for short-term interest rates to converge at a lower level than would otherwise be the case.

In addition to these considerations, there are several other factors that have unclear implications for the appropriate convergence level for short-term rates. One of these factors is that the macroeconomic indicators used in setting policy are not always fully comparable between countries. If, as seems plausible, the sensitivity of inflation to the output gap varies between countries, these differences need to be taken into account. More generally, other links in the transmission mechanism of monetary policy may differ across the EMU area. For instance, the sensitivity of aggregate demand to short-term interest rates may well vary owing to the maturity structure of outstanding debt contracts, the prevalence of variable rate financing and sectoral balance-sheet positions. In principle, these differences should also be considered in setting the EMU-wide short-term interest rate. It is also important to recall that interest and inflation rates have in many countries fallen to levels not seen for decades. This raises the possibility that estimates of national channels of transmission using data from earlier periods with higher inflation and interest rates may not be fully relevant in the current context.

Finally, with a common currency throughout the EMU area, national policy-makers' ability to accommodate wage-price shocks through subsequent currency depreciation is eliminated. Excessive wage increases will therefore have more direct effects on unemployment. Recognition of these changed circumstances may alter, although most probably gradually, the wage-price formation process in the participating countries, which in turn would have an impact on the transmission mechanism.

The monetary policy framework

Monetary and inflation targeting

A second question to be decided concerns the ECB's choice of monetary policy framework. At the time of writing, it appears that the ECB will adopt a system combining elements of monetary targeting and explicit inflation targeting. While in principle these targeting strategies differ, in practice any differences are likely to be small.

First, it is intended that the ECB will publicly define what it understands by price stability. In the light of its mandate, this definition is likely to influence heavily the public's inflation expectations even if a monetary targeting framework is adopted. Secondly, monetary aggregates are frequently used as information variables also in countries with explicit inflation targets. Likewise, in the past, central banks that employ monetary targets have relied upon them to guide policy in the medium term while still allowing the near-term inflation outlook to play an important role in the setting of interest rates.

A further reason why the distinction between monetary and inflation targeting is likely to be small in practice, at least initially, is that the establishment of EMU may be associated with considerable structural changes in the participating economies, particularly in their financial sectors. This suggests that money demand relationships could be subject to potentially important shifts (see also Chapter VI). Since monetary targeting requires a firm understanding of the demand for money in order to set target ranges and to determine what policy measures are necessary to achieve the targets, it may be difficult to interpret and control the aggregates in the period immediately following the establishment of EMU. Similarly, inflation targeting requires the construction of an inflation forecast in order to determine the path for short-term interest rates that is required to reach the targets. If the inflation process changes in an unpredictable way after the introduction of the euro, it may temporarily be difficult to conduct monetary policy using inflation targeting. Irrespective of whether it adopts explicit inflation or monetary targeting, or a combination of the two, the ECB is therefore initially likely to conduct monetary policy in an eclectic manner using a wide range of indicators.

Eclectic conduct of policy likely

Countries with inflation targets

Institutional developments

A new policy framework in the United Kingdom …

Industrial countries with explicit inflation targets for monetary policy have continued to refine their policy framework over the past year. On 6th May 1997 the new British Government announced that it would give the Bank of England

operational independence. Previously, the Bank's role in monetary policy had been advisory, while the final decision on official interest rates remained with the Chancellor of the Exchequer. Under the new arrangements, the Bank of England is given full responsibility for setting monetary policy to achieve an inflation target. The previous intention to keep inflation below 2.5% was replaced by a point target of 2.5%. Although the Government will reset this target in each annual budget, the expectation is that it will be kept stable.

Should inflation deviate from the target by more than 1 percentage point in either direction, the Bank's Governor will be required to send an open letter to the Chancellor explaining the deviation and indicating the monetary policy response. This exercise is to be repeated every three months as long as the deviation persists. This new arrangement makes explicit allowance for inevitable deviations from the point target due to the imperfect controllability of inflation, while making the central bank accountable for such deviations. At the same time, it keeps the focus (of the central bank and other economic agents) on the point target, which helps the convergence of inflation expectations.

Monetary policy decisions are now vested in a Monetary Policy Committee (MPC) which, at full strength, has nine members: the Governor, two Deputy Governors and two Executive Directors of the Bank of England, and four independent members appointed by the Chancellor. The MPC meets monthly and the minutes of its meetings are made public after a six-week interval. The Bank's Inflation Report now reflects the views of the MPC regarding the inflation outlook and sets out the rationale for monetary policy decisions.

… and smaller changes in Sweden, Canada and New Zealand

In Sweden, a Government bill which gives the force of law to the central bank's objective of safeguarding the value of money was presented to Parliament in November. In a move to make the message of the Inflation Reports more transparent, and following the practice in the United Kingdom and New Zealand, the inflation forecast is now presented as an expected path of inflation over the next two years including a margin of uncertainty. In Canada, the current 1–3% target range for inflation was extended in February 1998 to the end of the year 2001. This three-year extension will provide a longer period of time in which the economy can demonstrate more fully its ability to perform well under conditions of low inflation. The appropriate long-run target consistent with price stability will be chosen in the light of this experience. Finally, in New Zealand it was decided to move from semi-annual to quarterly Monetary Policy Statements in order to give more frequent formal guidance to market participants regarding the outlook for inflation.

Policy developments

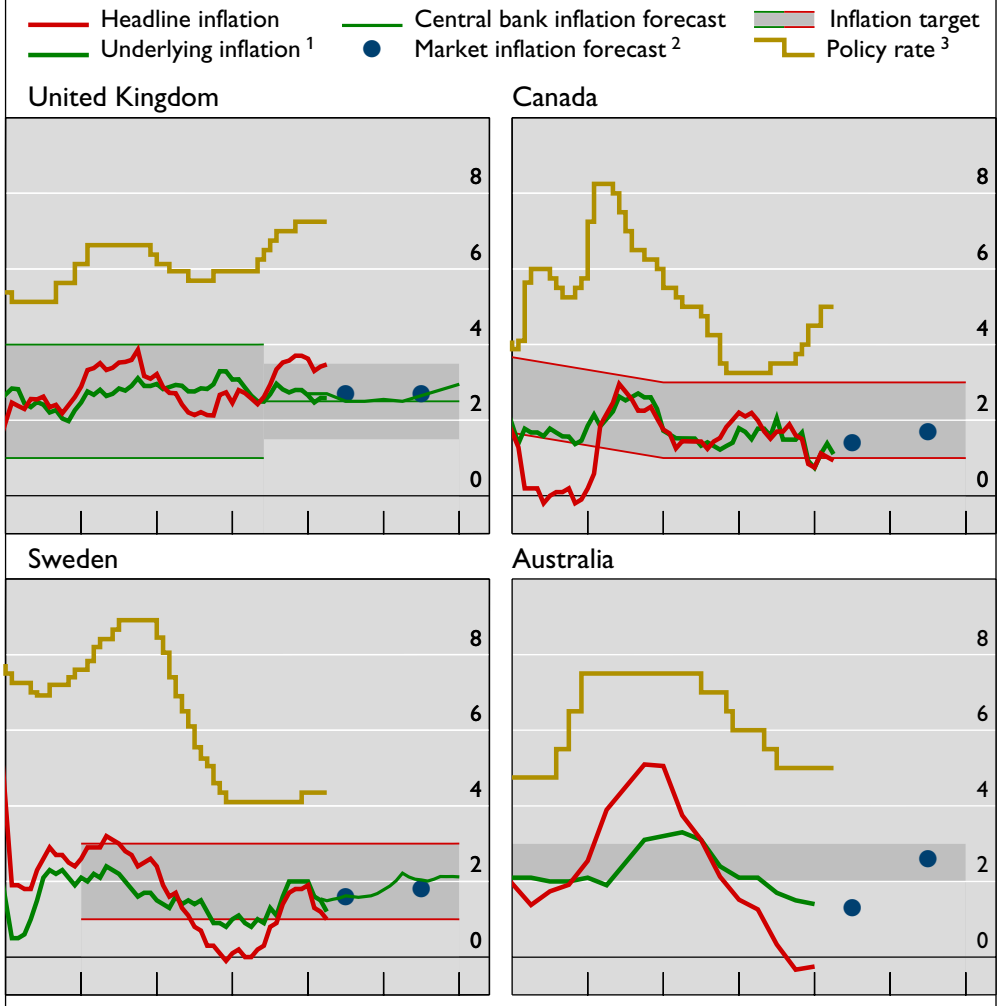
In most countries with inflation targets, the main challenge for monetary policy has been to promote monetary conditions that preserve the good inflation performance through the current economic upswing, thereby helping to make the economic expansion a long-lasting one. To that end, initially low policy rates needed to be raised, although the timing of the policy tightening differed across countries depending on the initial conditions and the effects of the Asian crisis.

Initial rise in UK policy rates …

In the United Kingdom, output grew in 1997 at a rate above 2% for the fifth year in succession. As a result the output gap is estimated to have closed

Inflation and policy rates in selected countries

In percentages



Note: Inflation rates are measured as the 12-month change in consumer price indices (CPI).

[1] For the United Kingdom, retail price index excluding mortgage interest payments; for Canada, CPI excluding food and energy prices and indirect taxes; for Sweden, CPI excluding indirect taxes and subsidies, interest costs and, after the move to a flexible exchange rate, the effects of depreciation; for Australia, CPI excluding seasonal food, petrol, mortgage interest payments, public sector charges and other volatile prices. [2] Of average annual headline inflation; surveys conducted in March 1998. [3] For a definition of the rates used, see Table IV.1.

Sources: © Consensus Economics, London, and national data. Graph IV.7

completely during the year. Consequently, after the May elections and the granting of operational independence to the Bank of England, the MPC raised interest rates in four steps of 25 basis points to 7%. Combined with the substantial appreciation of the pound sterling, this resulted in a considerable tightening of monetary policy.

… followed by a pause as signals conflict

Following this initial adjustment, monetary policy was increasingly faced with a dilemma owing to the different signals given by buoyant domestic demand, fuelled by rapid growth of wealth, money and credit, and strong downward pressures on prices in the tradable goods sector as a result of the substantial appreciation of sterling and, to a lesser extent, the effects of the Asian crisis. In

late summer, the MPC decided to cease tightening further in order to assess the direction in which the risks were likely to materialise. However, as both inflation and growth turned out stronger than forecast in the third quarter, an additional 25 basis point rise was decided upon in November 1997. The dilemma did not disappear during the first quarter of 1998, leading the MPC to cast a split vote for the first time in its short history. While the most likely inflation forecast two years out was above the target and the risks were skewed towards the upside, a significant degree of uncertainty about the magnitude and the timing of the expected slowdown in the economy tipped the balance towards not raising interest rates further.

Another reason for maintaining the status quo was the concern that, in the face of such uncertainty, an immediate rise in interest rates might shortly have to be reversed. There is some evidence that a dislike of reversals of this sort is not uncommon in the industrial countries. Central banks generally move interest rates several times in the same direction before reversing policy. Moreover, the interval between policy adjustments is typically considerably longer when the direction is changed (Table IV.1). As the size of the steps at turning-points is not systematically larger than at other times, this pattern of adjustment risks being interpreted as a tendency to move "too little, too late". One possible rationalisation for such behaviour is uncertainty about the evolution of the economy and the speed and strength of the transmission of policy impulses. Such uncertainty is likely to be greatest at the turning-points of the interest rate

Dislike of interest rate reversals is not uncommon

Policy rate adjustments

	Sequence of adjustment											
	Number of changes				Average duration[1]				Average change[2]			
	+ +	+ –	– +	– –	+ +	+ –	– +	– –	+ +	+ –	– +	– –
United States	6	1	2	22	41	108	321	39	0.46	0.25	0.25	0.28
Germany	65	31	31	107	22	24	34	14	0.25	0.19	0.12	0.15
France	8	5	6	86	47	72	77	31	0.51	0.40	0.83	0.21
Italy	9	6	6	24	122	182	121	83	1.31	0.88	0.96	0.73
United Kingdom	28	17	18	84	36	69	49	23	0.94	0.50	0.77	0.37
Canada	10	1	2	21	22	57	103	21	0.43	0.25	0.25	0.25
Spain	4	5	4	33	56	72	67	35	0.42	0.24	0.35	0.38
Australia	2	1	1	17	43	413	264	67	1.00	0.50	0.75	0.79
Netherlands	55	27	28	108	16	15	32	15	0.42	0.53	0.40	0.21
Belgium	9	7	8	82	17	10	82	10	0.45	0.24	0.34	0.14
Sweden	14	1	2	24	16	132	146	10	0.12	0.25	0.27	0.18
Austria	15	1	1	48	70	42	150	34	0.38	0.50	0.25	0.16

Note: + + = two successive increases (tightenings); + – = increase followed by decrease; – + = decrease followed by increase; – – = two successive decreases (easings).

Policy rates and starting dates of the sample periods: Australia, official target rate, 23rd January 1990; Austria, GOMEX, 6th May 1985; Belgium, central rate, 29th January 1991; Canada, operating band, 15th April 1994; France, tender rate, 4th January 1982; Germany, repurchase rate, 19th June 1979; Italy, discount rate, 1st January 1978; Netherlands, special advances rate, 1st January 1978; Spain, repurchase rate, 14th May 1990; Sweden, repurchase rate, 1st June 1994; United Kingdom, Band 1 bank bills, 1st January 1978; United States, federal funds target rate, 10th August 1989. End of sample periods, 31st March 1998.

[1] In days. [2] In percentage points. Table IV.1

cycle. A further reason for wishing to avoid frequent interest rate reversals is the desire to provide clear guidance to markets, both to strengthen the pass-through along the yield curve and to avoid destabilising markets. A concern of particular importance in the recent policy decisions at the Bank of England was that a sudden reversal might be attributed to a lack of consistency and poor judgement and therefore affect the credibility of the new monetary policy process.

While actual inflation in 1997 remained above the target in the United Kingdom, it was below the midpoint of the target band in Australia, Canada and Sweden. In Canada, some moderation in the degree of monetary stimulus was nevertheless considered necessary, as the Bank of Canada estimated that strong growth in 1997 and 1998 would eliminate the output gap by the end of 1998. The timing of the rise in policy rates was, however, largely dictated by developments in the foreign exchange market. In late June, when persistent weakness in the exchange rate caused a further easing in monetary conditions, the Bank of Canada raised its bank rate by 25 basis points. This was followed by a further 25 basis point increase in the policy rate in October, since rapid growth in narrow money, rising consumer confidence and strong business investment increasingly suggested that the economic expansion was becoming more self-sustaining.

Policy rates rise in response to exchange rate depreciation in Canada …

As the Asian crisis widened towards the end of last year, the Bank of Canada was confronted with a difficult choice. On the one hand, there was a perceived need to stabilise a falling exchange rate by raising policy rates further. On the other hand, there was a concern that higher rates could exacerbate the negative effects of the downward revision in the expected growth of world demand and the fall in commodity prices. In the end, the Bank of Canada raised interest rates in three steps to 5% in February this year as further pressure on the exchange rate threatened to affect the central bank's credibility. Similarly, in New Zealand interest rates responded strongly to the sharp decline of the New Zealand dollar in the summer of 1997 and again in October. However, in this case interest rates rose against a background of a gradual easing of overall monetary conditions in the light of reduced inflationary pressures.

… and New Zealand …

In contrast, but consistent with previous episodes, the Reserve Bank of Australia did not respond directly to the large depreciation of the Australian dollar in the same period. The willingness to accept such a sharp easing of monetary conditions probably reflects a combination of greater Australian sensitivity to commodity prices (see Chapter VI) and a larger trade exposure to Asia than is the case for Canada or New Zealand. In spite of the different policy responses, long-term interest rates in all three countries declined in line with the fall in world interest rates.

… but not in Australia

Finally, in Sweden the repurchase rate was increased by 25 basis points in December 1997, with inflation in 1999 forecast to rise above the midpoint of the target range. More recently, the forecast remained slightly above the midpoint even after the impact of the deepening of the Asian crisis was taken into account (Graph IV.7). Nevertheless, the central bank decided to refrain from further increases given the considerable uncertainties surrounding the implications of the Asian crisis.

Sweden

Monetary policy transparency

One of the most important features of recently established inflation targeting regimes is the enhanced transparency of the monetary policy framework. However, the movement towards greater policy transparency has extended beyond the countries with explicit inflation targets and must be seen against the background of the need for increased accountability that accompanies the greater independence of many central banks, and the rapid development and internationalisation of financial markets. The latter process has heightened the role of interest rates, exchange rates and other asset prices in the propagation of policy impulses. Since asset prices are also highly sensitive to expectational factors, the vulnerability of financial markets to unexpected policy movements may also have increased. This puts a premium on policy transparency.

Increased transparency concerning the central bank's objectives …

When discussing the advantages of improved transparency, it is useful to distinguish between whether the transparency pertains to the central bank's objectives, its strategy for achieving these objectives or its operational framework (i.e. the instruments and procedures employed in setting policy). Generally speaking, there appears to be little disagreement on the merits of making the central bank's objectives transparent. The move towards greater clarity concerning the objective of price stability is most obvious in countries with explicit inflation targets, but can be observed in other countries as well. For example, the new Bank of Japan Law clearly lays down the pursuit of price stability as the main objective. Similarly, at the European Monetary Institute it has been agreed that, whatever the final decision taken by the ECB Governing Council concerning the appropriate strategy, the ECB will provide a public

Monetary policy transparency

	G-3			Countries with inflation targets				
	US	JP[1]	DE	NZ	CA	GB	SE	AU
Objectives								
Price stability overriding objective	N	N/Y	Y	Y	Y	Y	Y	Y
Quantified objective	N	N/N	Y[2]	Y	Y	Y	Y	Y
Strategy								
Inflation reports	N	N/Y	Y	Y	Y	Y	Y	Y
Regular parliamentary hearings	Y	Y/Y	N	Y[3]	Y	Y[3]	Y	Y
Intermediate targets[4]	N	N/N	Y	Y	N	Y	Y	N
Operational procedures								
Announcement of policy decisions	Y	N/Y	Y[5]	Y[6]	Y	Y	Y[5]	Y
Announcement of desired future path	N	N/N	N	Y	N	N	N	N
Publication of minutes[7]	Y	N/Y	N	N	N	Y	N	N

US = United States; JP = Japan; DE = Germany; NZ = New Zealand; CA = Canada; GB = United Kingdom; SE = Sweden; AU = Australia. N = no, Y = yes.

[1] The second entry refers to the new Bank of Japan Law, which took effect in April 1998. [2] The medium-term inflation assumption used in calculating the monetary growth target is currently 1.5%. [3] The central bank Governor is accountable to the Government if inflation moves out of the target range. [4] M3 growth target in Germany; published inflation forecasts in New Zealand, Sweden and the United Kingdom. [5] Currently fixed rate tenders are used to convey clear signals about policy changes. [6] Monetary policy is implemented mainly through public statements, the most important being the Monetary Policy Statement. [7] The publication lag in the United States and in the United Kingdom is about six weeks, and is still to be determined in Japan. Table IV.2

definition of its final objective of price stability. One notable exception remains the United States, where various congressional proposals to clarify the Federal Reserve's mandate have failed to be translated into new legislation.

… and policy strategy

However, in view of the lags in the transmission process, transparency about the price stability objective is unlikely to be effective in guiding market expectations without greater openness about the central bank's strategy for achieving this objective. Many central banks have therefore enhanced their efforts to make their views of the state of the economy and the policy transmission process more widely known through the publication of inflation reports, regular parliamentary hearings and speeches by senior officials. One way of facilitating communication concerning the central bank's strategy and policy decisions is the use of intermediate targets. However, the use of traditional targets for monetary growth rates or exchange rates has often been problematic owing to instabilities in the relationship with the ultimate objective, or a lack of controllability. Thus an increasing number of central banks have started to publish their inflation forecasts as an alternative form of intermediate target (Table IV.2).

Advantages: promotes well-informed public debate …

Increased openness has a number of advantages. First, it requires the central bank to articulate its views on monetary policy more fully than it otherwise would have needed to do. Secondly, it promotes a well-informed and active public debate on the technical merits of alternative monetary policy decisions. Both developments are likely to be conducive to better policy-making. A third benefit is that transparency about both the objectives and the strategy increases the effectiveness of monetary policy in two important ways.

… helps to condition inflation expectations …

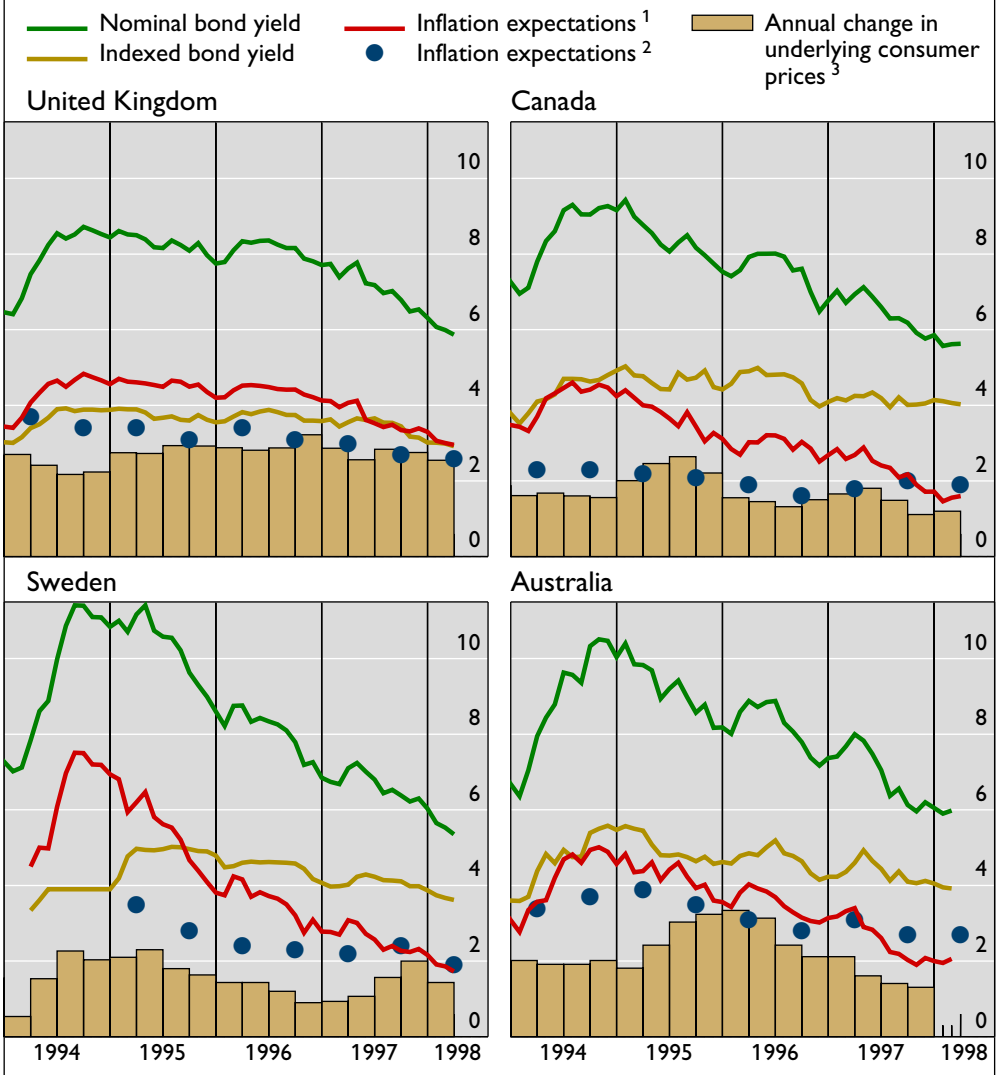
The first of these is that transparency may help to condition inflation expectations so as to bring down inflation and/or to contain it in the face of demand or supply shocks. This will occur largely through inflation expectations feeding through into wage and price behaviour. Graph IV.8 shows the development of different measures of long-term inflation expectations in a number of countries since the adoption of inflation targets. While it is obvious that the credibility of the inflation targets was not immediate, it is equally clear that long-term inflation expectations had by the end of 1997 generally converged to the midpoint of the target bands. Moreover, research based on survey expectations has found that the variance of the forecast errors decreased following the introduction of targets, although this may be related to the more stable behaviour of inflation itself. Finally, there is evidence that, as inflation expectations become more "anchored" to the inflation target, the inflation process itself becomes more sticky. Indeed, this could perhaps explain why inflation in Canada did not decline below the lower end of the target range in the 1995–97 period, in spite of a sizable output gap.

… and allows financial markets to play an equilibrating role

Secondly, if financial markets have a better understanding of the central bank's strategy, they may facilitate the central bank's task by playing an equilibrating role in the face of shocks. For example, news about a positive demand shock which threatens to raise inflationary pressures might lead to an immediate reaction in foreign exchange and bond markets as market participants realise that this shock raises the expected path of future interest rates. The resulting appreciation of the currency and increase in long-term interest rates would tend to offset automatically some of the incipient inflationary pressures in

Long-term inflation expectations, inflation and bond yields

In percentages



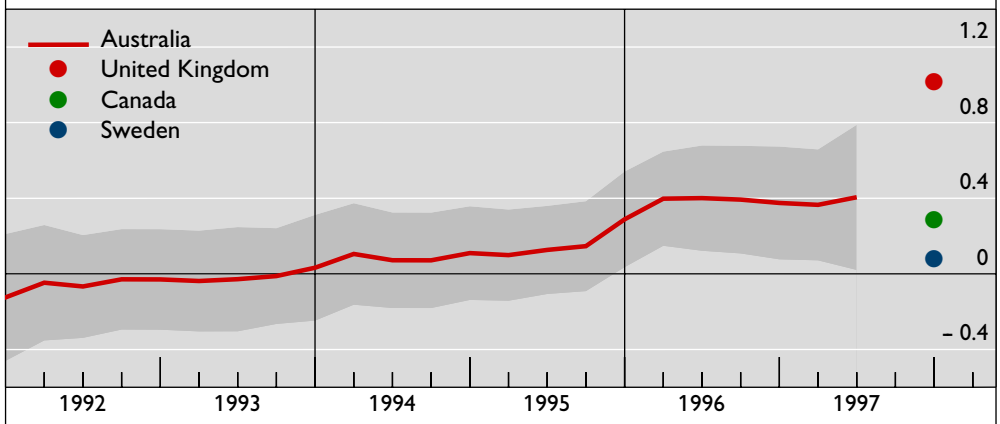
[1] Nominal less indexed bond yield. [2] Forecast of average inflation over the next ten years from semi-annual surveys. [3] For a definition of the indices used, see Graph IV.7.

Sources: © Consensus Economics, London, and national data. Graph IV.8

the economy. Graph IV.9 presents some evidence that is consistent with this hypothesis. It illustrates how, since the establishment in 1993 of a more transparent inflation targeting regime in Australia, positive inflation surprises have on average led to an appreciation of the exchange rate, whereas they had no significant effect before the new regime. A similar response of the exchange rate can also be identified under the Canadian and UK inflation targeting regimes. An interpretation of the Australian experience is that, when the policy reaction function is not transparent, a positive inflation surprise may have opposite effects on the exchange rate depending on whether it is expected to be accommodated or resisted. In the former case it will lead to a nominal depreciation, whereas in the latter case it will result in a real appreciation.

As suggested by the bottom part of Table IV.2, there is less consensus on transparency about operational procedures and internal policy deliberations.

Sensitivity of exchange rates to inflation surprises



Note: $\Delta x = \beta . \Delta \pi^{u} + \varepsilon_{t}$, where β denotes the sensitivity of the dollar (for Sweden, the Deutsche mark) exchange rate (Δx) to an inflation surprise ($\Delta \pi^{u}$), $\Delta \pi^{u}$ is measured as the difference between actual and expected monthly changes in consumer prices, and Δx is the exchange rate change following the release of consumer price data; a positive value indicates an appreciation. For Australia, a five-year rolling window regression (quarterly data); the shaded area marks the 90% confidence band (see de Brouwer and Ellis, Reserve Bank of Australia Research Discussion Paper No. 9803, 1998). For the other countries, a point estimate over the period 1993-97 (monthly data); the significance levels are 0.02, 0.13 and 0.77 respectively.

Sources: MMS International, national data and BIS estimates. Graph IV.9

Also greater transparency about the current policy stance …

However, there has been a gradual shift towards greater transparency about the current policy stance. Since the early 1990s, central banks in most of the English-speaking countries have started to announce changes in their operating targets. For example, the Reserve Bank of Australia has since January 1990 immediately announced any changes in the target level of the cash rate. Similarly, in the United States changes in the federal funds target rate have since February 1994 been announced on the day of the FOMC meeting.

This strategy has done much to eliminate ambiguity about the current stance of policy. Markets can no longer misinterpret an operation as indicating a shift in policy when one has not occurred. Moreover, the discipline of having to explain to the public the reasons for policy changes may have some of the advantages mentioned above. It may lead to greater rigour in the central bank's internal policy debates, a clearer focus on the objective of the policy change and a greater public acceptance and understanding of monetary policy decisions. Finally, it may also contribute to a more rapid transmission of policy changes into the interest rates that matter.

One concern was that announcing policy changes would reduce flexibility, in particular that it could lead to greater reticence in implementing policy changes and thereby increase response lags. One strategy that has been used to mitigate this problem in Germany and Sweden, where the repurchase rate is currently the main policy rate, is to change the tender procedure from fixed to variable rate tenders. In the latter case, it is less clear whether the outcome reflects the acceptance of minor fluctuations around a desired level or the beginning of the implementation of a policy change.

… but less so about future policy moves

While there is increased transparency about the current policy stance, central banks remain generally reluctant to be precise about future policy moves.

The only exception to this is the Reserve Bank of New Zealand which, starting with its June 1997 Monetary Policy Statement, has been publishing projections showing an endogenous path for monetary conditions consistent with achieving the inflation target. There is, however, an increasing tendency to forewarn markets about possible future policy moves through speeches and other publications. For example, Chairman Greenspan of the Federal Reserve signalled the 1994 interest rate tightening in his Humphrey-Hawkins testimony in the autumn of 1993. Similarly, the Bank of Canada emphasised the need for a future moderation in the degree of monetary stimulus in its Monetary Policy Report of November last year.

The disadvantages of transparency about future policy moves arise from the fact that there is often a good deal of uncertainty about the appropriate course of action to take to achieve a given price stability objective. In such circumstances it may be better to allow for some degree of ambiguity concerning the future path of policy. First, this might give an incentive to the markets to set market rates in accordance with their own assessment of the monetary policy outlook, which may be useful information for the central bank. Secondly, it may avoid unnecessary and costly market volatility, as market participants first attempt to protect themselves against projected policy moves only to find that such moves do not occur. Thirdly, when markets rely too much on central bank guidance, the central bank may be forced to comment or take action more frequently, even if the differences between data outturns and forecasts are only small. Some of these potential problems may, however, be reduced if financial markets become aware of the uncertainty surrounding such projections and of the need to reassess the policy response on a continuing basis as new information comes in. This is one of the reasons why central banks increasingly emphasise the complete probability distribution around their forecasts. Moreover, moving policy rates without explicit forewarning may equally create market volatility.

Few central banks publish minutes

Only a few central banks publish the minutes of the discussions in the policy-making body, and in all cases only with a considerable time-lag (Table IV.2). Such publication may be the most direct way of revealing the information and the arguments used by the policy-makers in setting the policy instruments. However, in some cases it is impractical to do so as the policy-making committee meets daily. A second reason for not revealing the content of the discussions is to promote a frank exchange of views and to avoid policy-makers speaking for the record. Finally, a frequently voiced fear is that the revelation of disagreements in the policy-making body may reflect badly on its reputation and might therefore upset financial markets. Against this it can be argued that disagreements among policy-makers are natural when policy is finely balanced and conclusions may differ depending on which risks are thought most material. In such a case, the revelation of such disagreements may be useful in that markets become aware of the uncertainty and the risks that surround the most likely forecast.

Implications for the ECB

In sum, while the debate continues about the appropriate degree of transparency concerning the tactical aspects of policy-making, it is commonly agreed that transparency at the strategic level (the central bank's objectives and its strategy for attaining these objectives) is desirable. In order to establish its reputation and legitimacy quickly, the European Central Bank's policies will need

to be transparent and accountable. The above-mentioned decision to publicly define the price stability objective is an important step in that direction. The requirements laid down in the Maastricht Treaty to publish quarterly reports and to present an annual report to the European Parliament are equally significant. The need for transparency is made all the greater by two further considerations. First, as discussed above, great uncertainty about the transmission of monetary policy in the EMU area and the relationships between various indicators and the price stability objective will, at least initially, put a premium on a discretionary policy approach, which inherently complicates communication with the public and the markets. Secondly, a monetary policy stance that is appropriate from an EMU-wide perspective may be more difficult to explain to national audiences.