### Monetary policy strategies in the countries of the European Union

Questions of monetary policy strategy have been receiving greater attention again over the past few years. Firstly, the economic and financial setting in which monetary policy operates has changed in many countries. A number of traditional reference variables have had to be abandoned and replaced by new ones. Secondly, the changeover to European monetary union requires a decision on a common monetary policy strategy. This is not easy since, up to now, the individual potential participating countries have been pursuing quite different strategies and have different experiences to go on. This article analyses the most important monetary policy strategies in the countries of the European Union against that background. In a brief look forward to monetary union there is a concluding recommendation that the comparative advantage of monetary targeting is used for the single monetary policy. On account of the uncertainties in the start-up phase of monetary union, that approach could be supplemented by a comprehensive inflation forecast.

# Principles of an efficient monetary policy strategy

In academic debate and political practice there is now a large degree of unanimity concerning the ultimate objective of monetary policy. The central banks' primary task is to safeguard price stability – not as an end in

Price stability as the goal of monetary policy

itself but as a foundation for economic growth which is as free of tension and as sustained as possible and as a basis for a satisfactory situation in terms of employment. Given the negative experiences of attempts at anticyclical fine-tuning, which – often contrary to the intended outcome – ended up aggravating cyclical fluctuations, monetary policy in most countries is now concentrating on those macroeconomic objectives to which it and its instruments are best suited. It is also generally acknowledged that the objective of price stability cannot be achieved or maintained over the short term. Rather, it has to be seen more in a medium-term context.

Decision on a strategy depends on various factors What particular kind of strategy should be used for pursuing monetary policy's ultimate objective remains a matter of debate, however. The individual countries in Europe have embarked on different paths, among which roughly speaking – it is possible to distinguish three groups in terms of their primary orientation: countries using a monetary target, countries using an exchange rate orientation, and countries using direct inflation targeting. The choice of the optimum strategy, which may also incorporate elements of differing approaches, mainly depends on the individual circumstances in the countries in question – in particular, their size, their foreign trade links, and their financial structures.

Requirements of an efficient strategy

An efficient monetary policy strategy must satisfy a number of criteria:

 The strategy must be geared to the ultimate objective of price stability; it must be determined in a way that allows price stability to be safeguarded taking due account of special national (or, at a later date, union-wide) features in the financial system and in the transmission path. The consistency between the strategy and the final goal requires a theoretical foundation and empirical verification.

- The monetary policy strategy must be transparent and comprehensible for the general public. This condition argues in favour of a certain degree of rule-based action and against a purely pragmatic approach which includes all possible indicators, largely in isolation, in the monetary policy decision process. The associated self-disciplining of the central banks simultaneously implies an obligation to justify their actions if there is a departure from the chosen reference variables. It is precisely an independent central bank which must constantly explain its action in a convincing manner. A clear strategy underlines its responsibility.
- The monetary policy approach must have long-term validity. This principle of continuity presupposes that the chosen strategy is robust in terms of changes in its environment a condition which was not met in a large number of countries and which frequently necessitated a change in strategy. However, the central bank should not itself play a part in the breaking-up or loosening of hitherto stable patterns of behaviour say, in financial relations by making overhasty adjustments to the strategy. Rather, by adhering to a tried and tested strategy, it can

exert a steadying influence even when times are difficult.

Taking an overall view, the soundness of the monetary policy strategy – together with the actual monetary policy measures taken – is crucial for the credibility and reputation of the central bank. A convincing strategy helps to stabilise inflation expectations at the desired low level. Although current monetary policy must indeed be able to respond flexibly to particular circumstances in a specific case, that flexibility must be embedded in an unambiguous basic strategy in order to maintain confidence in a monetary policy serving the ultimate objective of price stability.

## Types of monetary policy strategies in the EU countries

As mentioned above, there are primarily three strategies which have been practised in Europe hitherto: monetary targeting, exchange rate orientation and direct inflation targeting. Other approaches named in the literature, such as orientation to the growth of the nominal gross domestic product or to a target figure for interest rates (or the term structure of interest rates) have not been incorporated into practical policy-making within the European Union.

#### Monetary targeting

Early move to monetary targeting in Germany The strategy of monetary targeting has, for a long time, formed the centrepiece of German monetary policy. The Bundesbank made the move to setting and announcing monetary targets at a very early stage. The collapse of the Bretton Woods system meant that the Bundesbank was no longer obliged to defend exchange rates which had become unrealistic. That newly gained freedom was used to pursue a resolute policy of stabilisation, which, in particular, aimed to limit the expansion of the money stock. The first monetary target was decided as early as at the end of 1974.

Besides the Bundesbank, many other central banks adopted monetary targets during the seventies. At present, France, Italy and Greece – within the European Union – continue to publish monetary targets. After being adopted, similar targets were abandoned in the United Kingdom, Spain and the Netherlands, however, when they came into conflict with other reference variables or when their basis became no longer sustainable.

The monetary targets refer in all cases to a broad monetary aggregate. In Germany, the central bank money stock was used up to 1987; since then, the money stock M3 has been the benchmark variable. In the other countries, too, the intermediate monetary targets are primarily geared to monetary aggregates which include a broad range of liquid funds, with the definitions taking due account of the relevant individual circumstances. In France, for example, money market fund certificates - which have a significant volume have also been included in the intermediate target variable M3 since the early nineties. Broadly defined aggregates are obviously a better reflection of the liquidity situation, and hence the expenditure behaviour of nonGenerally broad monetary aggregates as an intermediate target

banks, than narrow aggregates. They are also affected less by erratic portfolio shifts.

Monetary targeting strategy in Germany

Intermediate target strategies superior from a theoretical point of view From a theoretical point of view, an intermediate target strategy is clearly superior to a single-stage procedure which attempts to exert a direct influence on the inflation rate. Given the long and variable time-lags between the deployment of the monetary policy instruments and the effect on price movements, and in view of the uncertainties in the transmission path, an intermediate target permits an early response to any risks of inflation. Intermediate targets provide transparency and an unambiguous assignment of responsibility. The central bank makes clear its intentions concerning how monetary policy stimuli are to be transmitted through the financial markets to prices, the portfolio movements it regards as appropriate in the case of the non-banks, and how it proposes to react in the event of undesirable trends.

Money stock as an intermediate target The "natural" intermediate target for monetary policy is the money stock. There is a longterm relationship between the money stock and prices which the central bank can use for deriving instructions for action. In the long run, inflation is always a monetary phenomenon. Difficulties may admittedly arise in the short and medium term if disturbances in the goods and financial markets also affect the demand for money and cause the relationship between the money stock, on the one hand, and aggregate demand and price movements, on the other, to become temporarily unstable, or if the monetary policy instruments' capacity to control the money stock is ieopardised.

In its monetary targeting history, Germany has been subject to many such disturbances, e.g. in the case of the oil price fluctuations of the seventies and eighties, during the numerous crises in the Exchange Rate Mechanism (ERM) of the European Monetary System (EMS) and its predecessor, following German unification, or on account of changes to the tax framework. As a consequence, it was comparatively often the case that the monetary targets were not met. All of these problems were not of a permanent nature, however, but were generally due to special factors which were effective only in the short term. The empirical basis of monetary targeting thus largely remained intact. In contrast to the situation in a number of countries, which had to abandon monetary targeting due to permanent structural breaks in the financial sector, the money demand function continues to be sufficiently stable in Germany something which is confirmed not only by numerous Bundesbank studies but also by those of other institutions and by academic research1.

The Bundesbank's monetary targeting was geared to the medium term from the outset. The starting point for determining acceptable money stock growth is the expected increase in production potential for the target year. This implies that relatively abundant liquidity was made available in years of recession, for example, when actual economic growth

Medium-term orientation

<sup>1</sup> See, for example, Wolters, J. and Lütkepohl, H., Die Geldnachfrage für M3: Neue Ergebnisse für das vereinigte Deutschland, ifo Studien, volume 43, pages 35-55, 1997; Scharnagl, M., Monetary aggregates with special reference to structural changes in the financial markets, Discussion paper 2/96, Economic Research Group of the Deutsche Bundesbank, March 1996.

lagged behind the growth in potential and capacity was underutilised. Conversely, in years when there was a risk of overheating due to economic growth exceeding the growth of potential, the expansion of the money stock was kept comparatively tight. The orientation of monetary targeting to the potential thus tends to have a stabilising effect on economic activity. In each case, an amount of money is provided that will allow existing capacity to be used as fully as possible without creating inflationary pressure.

The medium-term character of monetary targeting is also underlined by the fact that it is not the current price increase which is "financed" but a normative inflation rate which is intended to document the Bundesbank's determination to maintain price stability. Up to the mid-eighties, this was the rate of inflation that is unavoidable in the short term. Since then, a medium-term price assumption has been included in the monetary target which is consistent with the Bundesbank's intention of achieving a large measure of price stability. Finally, in deriving the monetary target, due account is taken of the long-term declining trend in the velocity of circulation of money.

The expansion of the money stock which is initially regarded as appropriate on an annual average is then translated in a second step into a target from the fourth quarter of the previous year to the fourth quarter of the current year. Given the uncertainties in the short-term movement of the money stock, a "corridor" is normally placed around the potential-oriented four-quarter growth rate.

Despite occasional marginal adjustments, the procedure described here has been maintained since the strategy of monetary targeting was introduced. A monetary target derived from medium-term benchmark figures was also announced for 1998, the last year before European monetary union (see page 17 ff. of this Report).

This continuity has been possible, not least, because the German financial system was liberalised to a large extent at an early stage. Additionally, Germany has had a higher degree of price stability and lower fluctuations in the inflation rate than the vast majority of countries. Both factors have played a major part in the abrupt emergence of financial innovations scarcely posing a potential source of disruption to the strategy of monetary targeting in the longer term. On balance, stability in the financial markets, continuity in the strategy, and price stability have had a positive effect on each other.

In its monetary targets, the Banque de France places great emphasis on the medium-term orientation. Whereas it formerly – like the Bundesbank – announced annual targets, it proceeded to set a medium-term trend for the rate of growth of the money stock M3. Since 1994, it has set a target for this money stock to grow by an annual average of 5%. The derivation of this target is based on the assumption of a non-inflationary growth potential for the real gross domestic product (GDP) of 2.5% and an inflation target of not

more than 2%.

Continuity in the strategy

Monetary targets in other countries

### Principal features of monetary policy strategies in countries with monetary targeting

Item	Germany	France	Italy	Greece
Target variable	M3	M3	M2	M3
Current monetary target 1	3 % - 6 %	5 % 2	5 %	6 % – 9 %
Underlying normative inflation	1.5 % – 2 %	2 %	2 %	< 4.5 % 3
Additional intermediate targets or major indicators which are stated when the target is announced	-	Exchange rate, M1, M2, M3 + P1 4, total domestic indebtedness	Exchange rate, additional indicators	Exchange rate, M4, domestic credit

1 For Germany, France and Italy: 1998; for Greece: 1997; target in the course of the year. — 2 Medium-term

growth trend. — **3** Target figure for 1998: 2.5 %. – **4** P1 contains additional liquid assets.

Deutsche Bundesbank

In Greece, the monetary target for M3 is derived from the inflation target (which was set below 4.5 % for the end of 1997), the forecast of the real growth of GDP and the assessment of the change in the velocity of circulation of M3. As in 1996, the monetary target for 1997 was 6 % to 9 %. A further reduction in the inflation rate to 2.5 % is aimed for this year.

In Italy, the inflation target for 1998 was set at 2 % or less. On the basis of the Banca d'Italia's assessment of the development of the overall economy, this gives an appropriate monetary growth for M2 of 5 %. This was the same as the target for monetary growth in 1997.

Hence, in all of these countries – as has been the case in Germany for a long time – an explicit normative inflation rate is an integral part of deriving monetary growth.

The central banks using monetary targeting have recently been placing greater stress on the significance of additional indicators. This came about, not least, because of increased short-term volatilities in the money demand in these countries and the greater uncertainty in defining appropriate monetary variables. In some cases, additional monetary and credit aggregates have been used in an ancillary capacity for assessing the monetary situation. For a number of years the Banque de France, for instance, has been paying particular attention to the development of additional monetary aggregates and the trend in overall

Increased attention paid to other indicators indebtedness in the domestic economy, and the Greek central bank has been paying particular attention to the more broadly defined money stock M4 as well as to the growth in total domestic credit. In the recent past, the French central bank has announced targets for several money stock aggregates. Furthermore, all four central banks using monetary targeting analyse the whole range of real economic and financial indicators as well as the monetary aggregates in order to shed light on future price movements. With the exception of Germany, which has the Deutsche Mark anchor currency, particular importance is attached to the stabilisation of exchange rates.

#### Exchange rate orientation

Exchange rate orientation in smaller countries

Even after the collapse of the Bretton Woods system, the majority of smaller countries in Europe maintained their primary orientation to the exchange rate. A strategy primarily based on domestic indicators and intermediate targets was not attractive because of the paramount significance for the economy as a whole of those sectors with foreign trade links, the major importance of import prices for domestic price trends, and – given large capital flows with abroad – the rather loose relationship (at least in the short term) between domestic monetary and credit developments and major domestic macroeconomic variables such as growth and price movements. There were, however, technical differences in the design of the exchange rate orientation. Some countries - such as the Netherlands, Denmark and Belgium (including Luxembourg, with which a monetary as-

# Money stock definitions in selected countries with monetary targets

Country		Item
Germany	М3	<ul> <li>currency and sight deposits</li> <li>time deposits for less than four years</li> <li>savings deposits at three months' notice</li> </ul>
France	M3	<ul> <li>currency and sight deposits</li> <li>savings deposits and special savings schemes</li> <li>deposits and negotiable debt instruments in foreign currency</li> <li>time deposits</li> <li>money market fund certificates</li> <li>CDs and other negotiable short and medium-term debt instruments issued by banks and other financial institutions</li> </ul>
Italy	M2	<ul> <li>currency and sight deposits</li> <li>banker's drafts</li> <li>savings and time deposits with banks and savings accounts with the post office</li> <li>short-term CDs</li> </ul>
Greece	M3	<ul> <li>currency and sight deposits</li> <li>savings and time deposits</li> <li>repurchase agreements with the private sector</li> <li>short-term bank bonds</li> </ul>
Deutsche Bund	lesba	ink

sociation exists) – initially chose the European Currency Snake as a point of reference. Other economies, such as Finland and Sweden (which were not members of the European Community), orientated themselves to a basket containing the currencies of their major trading partners.

During the eighties and nineties, a number of countries increasingly stressed the close linkage to the actual key currency in the ERM, the Deutsche Mark, as the guideline of their monetary policy, thereby indirectly adopting the Bundesbank's money stock orientation. In doing so, accompanying reference variables – which were originally regarded to a certain extent as the complementary basis of policy, and which were intended to review and corroborate the exchange rate orientation

Indirect linkage to the German monetary target by exchange rate orientation in the ERM

internally – steadily waned in importance. A typical example of this was the monetary policy of De Nederlandsche Bank. The liquidity ratio, i. e. the ratio of the money stock M2 to the national product, which it originally used as guideline in parallel with the exchange rate orientation, became less and less important. Exchange rate targets within the ERM gained greater prominence even for central banks which did not wish to dispense with an orientation to domestic indicators and intermediate targets.

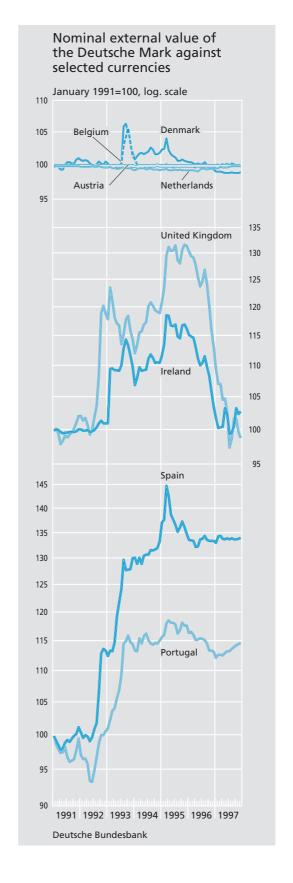
Austria, the Netherlands, Belgium (including Luxembourg), and Denmark are the principal countries which have largely pegged their exchange rates to the Deutsche Mark. Since early 1994, the exchange rates of the first three countries have fluctuated within a margin of no more than ± 1% against the Deutsche Mark. In the case of Austria and the Netherlands, the fluctuations were already this small previously.

The central banks of Portugal and Ireland also orient themselves to the exchange rate. On account of their special situation, the currencies of those countries have, in some instances, fluctuated considerably against the Deutsche Mark, however. This is due to the traditionally close economic links with their larger neighbouring countries, i.e. Spain and the United Kingdom, respectively.

#### Direct inflation targeting

New strategy of direct inflation targeting

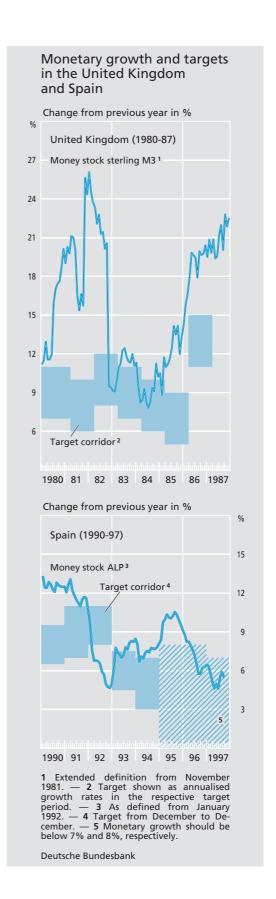
The strategy of direct inflation targeting is fairly new in comparison with monetary targeting and the exchange rate orientation. In



1992, the United Kingdom was the first European country to adopt this monetary policy approach following the development of this strategy in New Zealand and Canada. Sweden and Finland followed in 1993, and Spain in 1994.

In most cases, the move to direct inflation targeting was not undertaken because this strategy was acknowledged to be fundamentally superior in theoretical or empirical terms, but was primarily "born of necessity". Monetary targeting and exchange rate orientation (or both strategies in succession) had failed in those countries. To avoid the risk associated with a purely discretionary course, those approaches had to be replaced by a new strategy in order to achieve and safeguard the ultimate objective of price stability.

Example of the United Kingdom The route leading to this new strategy was mostly not a direct one. This is illustrated by the example of the United Kingdom. In the mid-seventies, target values were initially introduced for the money stock M3 and domestic expansion of credit following the application of a target for domestic borrowing in the late sixties. After various modifications in the ensuing years and considerable target misses - in some cases against a backdrop of financial innovations - targets for additional monetary aggregates were announced in the first half of the eighties. M3 was soon abandoned as an intermediate target variable, however. In the second half of the eighties, British monetary policy was at first geared – informally – to the Deutsche Mark exchange rate; this was superseded by a "pragmatic" policy based on a number



of indicators. In October 1990, the United Kingdom joined the ERM. Thus, the Deutsche Mark, which functions de facto as the system's key currency, served as an anchor. In September 1992, the United Kingdom left the ERM in the wake of heavy speculative attacks on the pound sterling. Since then, the Bank of England has been conducting direct inflation targeting, the precise form of which has again been modified in the meantime.

Spain, Sweden and Finland The Spanish central bank, too, had begun with an M3 target in the seventies. In the years that followed, a number of financial innovations forced a gradual broadening of the intermediate target variable. After entering the ERM at the end of the eighties, conflict occurred on several occasions between the monetary and exchange rate targets, the exchange rate orientation generally being given priority. But this policy, too, subsequently proved to be problematic in view of various turbulences and depreciations. From 1994 onwards, the Spanish central bank therefore adopted direct inflation targeting. In Sweden and Finland it was likewise unsatisfactory experience of an exchange rate linkage which led their central banks to prefer a single-stage strategy of inflation control.

Differences in responsibility for setting the inflation target ...

The approaches adopted by these countries differ, however, in a number of institutional and technical aspects. In the United Kingdom, the inflation target is announced by the government. Since a short time ago, however, the Bank of England has been free to take the measures it regards as necessary within that framework. In the other three countries, it is the central banks themselves

which define the targets for the tolerable rate of inflation.

There are also differences in the specific way in which the announcement of the target is formulated. The central banks are confronted with a dilemma in the case of the direct inflation targeting approach. On the one hand, central bank policy should be transparent for the general public and gain credibility by virtue of the target being announced in terms which are as precise as possible. On the other hand, due account must be taken of the fact that monetary policy alone cannot control price movements. In some cases, attempts have been made to overcome this difficulty by setting targets for "adjusted" price indices. The effects of indirect taxes, subsidies, and housing-related capital costs are generally excluded by the Finnish central bank from the consumer price index which it uses for orientation. For this purpose, interest on mortgage loans (which is contained in the British cost of living index) are not included in the retail price index in the United Kingdom.

Above and beyond that, due account has been taken of the limited possibilities of controlling inflation rates in the short term by central banks not stating precise target rates but instead setting target corridors or maximum limits for inflation. Additionally, they have also occasionally signalled that they understand a target of this kind to be no more than a guideline. The Swedish central bank currently applies a target corridor of 1% to 3%, for example. An inflation target of 2½% exists at present in the United King-

... and formulating the target announcement

### Principal features of monetary policy strategies in countries with direct inflation targeting

Item	United Kingdom	Sweden	Finland	Spain
Inflation targeting began	October 1992	January 1993	February 1993	November 1994
Most recently announced inflation target	2.5 %	2 % ± 1 percentage point	2 %	2 %
Target variable	Retail price index excluding mortgage interest payments (RPIX)	General index of consumer prices	Index of consumer prices less effects of subsidies, indirect taxes and housing- related capital costs	General index of consumer prices
Additional intermediate targets and major indicators	Money stocks M0 and M4	-	Exchange rate (ERM member)	Exchange rate (ERM member), Money stock ALP
Publications on inflation outlook	Quarterly Inflation Report with explicit inflation forecasts	Quarterly Inflation Report with explicit inflation forecasts	Quarterly in the regular Monthly Bulletin of the central bank	Half-yearly Inflation Report
Responsibility for setting the target	Government	Sveriges Riksbank	Suomen Pankki	Banco de España
Deutsche Bundesbank	1	•		

dom; deviations of more than one percentage point in either direction places the central bank under an obligation to justify its actions to the government and the public. For 1997, the Spanish central bank announced a target of under 3 % for the rise in consumer prices. This figure was already undershot at the beginning of last year, and the target variable is now 2%. The Finnish central bank, finally, specifies a figure of around 2 %. Despite individual variations, these figures show that the envisaged targets are all in a similar range and come guite close to the requirement of price stability. That applies, incidentally, not only to these European countries but also to the other central banks in the world which conduct direct inflation targeting.

In order to increase the transparency of their policy, the central banks of the four named European countries publish inflation reports in which they present the inflation expectations on which their decisions are based to the general public. There are, however, considerable differences in terms of the reports' specific content. The Bank of England and the Swedish central bank publish inflation forecasts over a period of two years (including a number of alternative computations). By contrast, the central banks of Spain and Finland confine themselves, in general, to a qualitative description of the outlook for price movements.

All the central banks mentioned used a large number of indicators to support their inflation forecasts. In many cases, special importance Publication of inflation reports ...

... and the use of a large number of indicators, including monetary aggregates is attached to monetary trends. The Spanish central bank, for example, continues to analyse the growth of a broad monetary aggregate. It assumes that the expansion of this money stock must not exceed an upper limit when viewed over a fairly long period if price stability is to continue to be safeguarded. In the United Kingdom, corridors for the growth of the monetary aggregates M0 and M4 were announced by the government up to last year; overshooting the upper limit was construed as a warning sign. After it had become largely independent in its monetary policy decisions, the Bank of England initially dispensed with this practice. Irrespective of that, however, the money stock trend continues to have key importance in interest rate decisions. In specific terms, however, it is not always apparent to the general public how the various indicators are ultimately combined in a forecast and how the appropriateness of monetary policy measures is derived from them - something which applies to the majority of countries using inflation targeting.

Summary and assessment of monetary policy strategies and a look forward to European monetary union

Stability successes in the nineties Overall, despite the differences in monetary policy strategy, inflation rates in Europe have been brought down to a remarkable extent in the nineties. At present, no fewer than eleven countries have a rate of inflation below 2 %, measured in terms of the year-on-year rise in harmonised consumer prices. In another three countries, inflation is between 2 % and 3 %. Greece has succeeded in lowering its

inflation rate to 5%. As recently as 1991, Greece's rate of inflation had been distinctly higher than 20%. To that extent, it is possible to speak of major anti-inflation policy successes in the nineties.

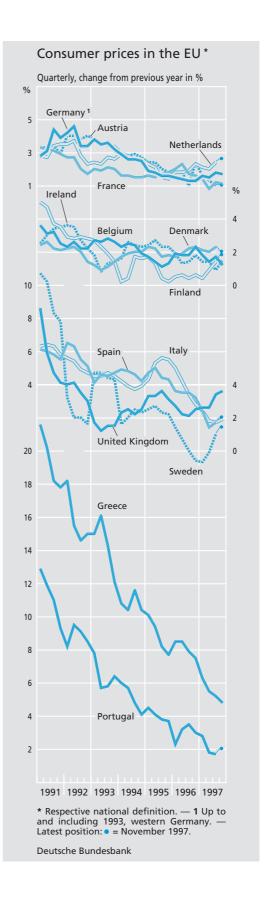
It is not possible to give a clear-cut answer to the question of whether that success, particularly in those countries which decided on a new strategy in the nineties, was solely, or even mainly, attributable to the new orientation. The monetary policy setting was generally favourable during that period, and inflation fell quite generally in the western industrial countries. Furthermore, the stability success achieved by those countries which undertook a strategic reorientation was, if anything, average.

Contribution of direct inflation targeting open to question

A number of studies have been made of the question as to whether the move to a policy of direct inflation targeting by itself influenced price expectations and therefore made achieving price stability easier. If the spread between capital market rates in those countries and the capital market rate in Germany, or the interest rate expectations derived from the term structures are taken as a potential yardstick for that purpose, there are scarcely any clear indications pointing in that direction. No reduction in interest rate differentials was recorded in the initial period following the change in strategy in Spain and the United Kingdom, for example. Although the corresponding interest rate differentials declined in the year the strategy was adopted in Sweden and Finland, this was a continuation of a pre-existing trend which, in any case, went into reverse again in the following year.

There are, in fact, many indications that the value of a monetary policy strategy is revealed only over a lengthy period of time and, in particular, in a setting that tends to be unfavourable. Whereas the monetary targeting strategy which the Bundesbank has been pursuing for more than twenty years has already passed many rigorous tests, experience of direct inflation targeting in Europe is confined to the past five years and a period of low rates of inflation worldwide. It may hence be still too early for a final judgement on this approach.

Monetary targeting tried and tested over many years In Germany, prices have been kept comparatively stable over a long period. The average rate of inflation over the past 25 years has been four percentage points below the average of the other EU countries. This is probably attributable, not least, to the monetary policy approach and the continuity in its application. Additionally, this outcome underlines the theoretical considerations that monetary targeting has distinct advantages with regard to the transparency of central bank policy, the assignment of responsibilities, and the self-discipline and credibility which follow from them. The main reason why adherence to a proven strategy has been possible is that the empirical preconditions for an intermediate monetary target have been consistently in place in Germany. By contrast, after the early adoption of monetarist ideas in the seventies, other central banks were faced with structural breaks in the basic monetary relationships and had to abandon their primary orientation to the money stock.



Difficult situation at the start of EMU The past experience of the different countries will undoubtedly play a major role in the decision on which monetary policy strategy should be used by the European Central Bank (ECB) in stage three of monetary union.<sup>2</sup> But allowance will also have to be made for the imponderables of the new situation, which is without historical precedent.

Of the monetary policy approaches under discussion here, the exchange rate orientation does not come under consideration for European monetary union (EMU). In view of the size of the area covered by the union, the euro's expected international role, and the associated predominance of capital movements in determining rates in the foreign exchange markets, there is probably no reasonable alternative to a system of fundamentally floating exchange rates between the US dollar, the Japanese yen, and the euro. The remaining "candidates" for the monetary policy strategy in EMU are hence monetary and direct inflation targeting. Both strategies are being prepared by the European Monetary Institute. The final decision on the strategy to be pursued in the monetary union will be taken by the ECB's Governing Council following the establishment of the European Central Bank.

Monetary targeting strategy advisable for the monetary union, too Bearing in mind the historical experience in Germany as the anchor country of the ERM, a monetary targeting strategy is fundamentally advisable for EMU, too. Such an approach would conform to the principles of consistency, transparency and continuity – something which will be of special importance, particularly in the start-up phase of EMU when the ECB still has to establish its reputa-

tion. The empirical preconditions for an intermediate monetary target appear to be in place. Numerous studies indicate that the money demand in a larger European context is likely to be more stable than it is now in a national environment.<sup>3</sup>

However, the possibility of greater volatility in the money stock cannot be ruled out, especially in the start-up phase of monetary union. Monetary union itself implies a changeover for enterprises and households which may lead to shifts in portfolios. Moreover, the financial structures in the member countries still differ quite widely in some respects. That might also lead to instabilities in the transmission path and the short-term money demand.

Adding elements of direct inflation targeting may be useful

In view of such initial difficulties, it might prove to be expedient to supplement the monetary targeting strategy with elements of direct inflation targeting. In particular, a comprehensive inflation forecast incorporating all the indicators which are relevant to inflation is likely to make a major contribution to identifying any emerging inflationary pressure as early as possible. A procedure of this kind would also document the fact that the monetary targeting strategy serves as an instru-

Additions possible

**<sup>2</sup>** With regard to possible strategies for the ECB, see European Monetary Institute, The Single Monetary Policy in Stage Three, Specification of the operational framework, Frankfurt am Main, January 1997.

<sup>3</sup> See, for example, Monticelli, C, EU-Wide Money and Cross-Border Holdings, Weltwirtschaftliches Archiv, volume 132 (2), 1996, pages 215-235; Falk, M. and Funke, N., The Stability of Money Demand in Germany and in the EMS: Impact of German Unification, Weltwirtschaftliches Archiv, volume 131 (3), 1995, pages 470 – 488, and for an overview, Browne, F.X., Fagan, G. and Henry, J., Money Demand in EU Countries, A Survey, European Monetary Institute, Staff Papers, No. 7, March 1997.

ment for achieving the ultimate objective of price stability, and that this is what the success of monetary policy is ultimately measured by. This would place the ECB under a double obligation to justify its actions. It would have to explain its policy to the public

in terms of both its monetary target and its price expectations. Comprehensive transparency of this kind might assist in rapidly establishing the credibility that is needed for a successful monetary policy.