

The stability-oriented monetary policy strategy of the Eurosystem

In October and December 1998, the Governing Council of the European Central Bank (ECB) announced the main elements of its stability-oriented monetary policy strategy to the public. This strategy is designed to maintain price stability in the euro area, thereby fulfilling the mandate given to the European System of Central Banks (ESCB) by the Treaty establishing the European Community (the Treaty). The strategy will guide the single monetary policy of the Eurosystem, i.e. the ECB and the national central banks (NCBs) of the 11 Member States which adopted the euro from the start of Stage Three of Economic and Monetary Union (EMU) (see *The Eurosystem and the European System of Central Banks (ESCB)* in this Bulletin). The stability-oriented strategy of the Eurosystem consists of three main elements: a quantitative definition of the Eurosystem's primary objective, namely price stability, and the two pillars of the strategy used to achieve this objective. These pillars are a prominent role for money, as signalled by the announcement of a quantitative reference value for the growth rate of a broad monetary aggregate, and a broadly based assessment of the outlook for price developments and risks to price stability in the euro area as a whole.

I Price stability and its importance

The Treaty states that *the primary objective of the ESCB shall be to maintain price stability* (see Box 1: The Eurosystem's mandate: Key excerpts from the Treaty). In order to fulfil this clearly defined mandate, the Treaty accords the ESCB and, by implication, the Eurosystem a considerable degree of institutional independence, albeit supplemented by extensive obligations concerning transparency and accountability.

The logic of the Treaty is clear. By unambiguously assigning the primary objective

of price stability to an independent central bank, the Treaty recognises that focusing monetary policy on the maintenance of price stability in the euro area ensures that it will make the best possible contribution to the broader economic objectives of the European Union and its citizens. This view is rooted in the belief confirmed by decades of practical experience and a substantial body of empirical economic research that a monetary policy that maintains price stability in a credible and lasting way will make the best overall contribution to improving

Box 1

The Eurosystem's mandate: Key excerpts from the Treaty

Article 105 (1)

The primary objective of the ESCB shall be to maintain price stability. Without prejudice to the objective of price stability, the ESCB shall support the general economic policies in the Community with a view to contributing to the objectives of the Community as laid down in Article 2.

Article 2

The Community shall have as its task ... to promote throughout the Community a harmonious and balanced development of economic activities, sustainable and non-inflationary growth respecting the environment, a high degree of convergence of economic performance, a high level of employment and of social protection, the raising of the standard of living and quality of life, and economic and social cohesion and solidarity among Member States.

Article 3a

For the purposes set out in Article 2, the activities of the Member States and the Community shall include ... the definition and conduct of a single monetary policy and exchange-rate policy the primary objective of both of which shall be to maintain price stability and, without prejudice to this objective, to support the general economic policies in the Community.

Box 2

The benefits of price stability

A large number of economic arguments point to the benefits of price stability. This box focuses specifically on the benefits of price stability for real economic growth and employment prospects. Among the main arguments are:

1. Price stability improves the transparency of the *relative price mechanism*, thereby *avoiding distortions* and helping to ensure that the market will *allocate real resources efficiently* both across uses and across time. A more efficient allocation will raise the productive potential of the economy. In this sense, price stability creates an environment in which the necessary structural reforms implemented by national governments to increase the flexibility and efficiency of markets can be most effective.
2. As discussed in the main text, stable prices *minimise the inflation risk premium* in long-term interest rates, thereby lowering long-term rates and helping to stimulate investment and growth.
3. If the *future price level is uncertain*, *real resources are diverted to hedging* against inflation or deflation, rather than being put to productive use. Credibly maintaining price stability avoids these costs and provides the environment for efficient real investment decisions. Price stability also eliminates the real costs entailed when *inflation or deflation exacerbates the distortionary effects of the tax and welfare system* on economic behaviour.
4. Maintaining price stability *avoids the large and arbitrary redistribution of wealth and incomes* that arises in inflationary as well as deflationary environments, and therefore helps to maintain social cohesion and stability.

These arguments collectively suggest that maintaining price stability in itself contributes to the achievement of output or employment goals. The logic underlying both the Treaty and the Eurosystem's stability-oriented monetary policy strategy is therefore that output and employment goals are best served by a monetary policy that focuses on price stability.

In addition, the empirical evidence strongly suggests that the benefits of price stability for real economic performance are significant. Several studies have shown that, across a large number of countries, nations with lower inflation appear, on average, to grow more rapidly (for example, Robert J. Barro demonstrates this in *Determinants of economic growth*, MIT Press, 1997). Furthermore, empirical estimates of the benefits of price stability can be very substantial. A number of studies have shown that the costs incurred when inflation exacerbates the distortions inherent in tax and benefit systems are considerable (see, for example, Martin S. Feldstein, *Costs and benefits of price stability*, Chicago University Press, to be published in 1999). Extension of this analysis to several euro area countries suggests that the benefits of maintaining price stability in these contexts may be even higher than in the United States.

economic prospects and raising living standards. Box 2 reviews the main arguments why the benefits of price stability for growth and employment are substantial.

The Treaty also recognises that the Eurosystem's single monetary policy will interact with policies implemented by other institutions in the European Union. Given the

potential risk of political intervention in the design and implementation of the single monetary policy, the Treaty made the ECB and the national central banks (NCBs) independent of national governments and political interference. This institutional independence allows the Eurosystem to pursue price stability in an appropriate medium-term framework and thereby significantly enhances the credibility of

monetary policy. It is widely recognised that a central bank lacking independence is susceptible to short-term pressures that may be prejudicial to the maintenance of price stability. The Eurosystem's institutional independence, as guaranteed in the Treaty, therefore serves the interests of the public, which benefits from the resulting environment of stable prices.

Price stability and the exchange rate

However, institutional independence does not mean isolation. The Eurosystem will interact with other policy-makers, for example with regard to exchange rate policy. Since exchange rate policy must be consistent with monetary policy, the Treaty states that the primary objective of the Community's exchange rate policy is the maintenance of price stability. In this context, the Treaty assigns the Eurosystem the basic task of conducting foreign exchange operations consistent with the provisions of Article 109. Article 109 foresees that the Council of Ministers (in the composition of the Ministers of Finance), acting with unanimity, may conclude formal agreements on an exchange rate system for the euro in relation to non-Community currencies. In addition, it notes that, acting with a qualified majority, the Council of Ministers can also issue general orientations to the Eurosystem concerning exchange rate policy. Regarding the former issue, the Council of Ministers clarified in a report to the European Council in December 1997 that, in all likelihood, a formal exchange rate system of this type will not be established in the foreseeable future. In the same report, the Council of Ministers announced, albeit in a not legally binding form, that they will only issue orientations in exceptional circumstances, for example in the case of a clear misalignment.

In the present circumstances in which there is neither a formal exchange rate agreement nor a general orientation the euro exchange rate is the outcome of current and expected monetary and other policies in both the euro area and elsewhere, and of the perception of

these policies by market participants. As the Eurosystem's monetary policy strategy does not embody an exchange rate target for the euro, the task of focusing on the maintenance of price stability in the euro area is facilitated.

Monetary policy and support for general economic policies

Reflecting the broad need for mutual co-operation and dialogue among policy-makers in an interdependent environment, the Treaty requires the Eurosystem to *support the general economic policies in the Community with a view to contributing to the objectives of the Community laid down in Article 2*. At the same time, in further recognition of the dangers of political interference in monetary policy, the Treaty states that the Eurosystem's actions must be *without prejudice to the objective of price stability*. Both the logic of the Treaty and the argumentation in Box 2 strongly suggest that the best contribution the single monetary policy can make in this supportive role is to focus unambiguously on maintaining price stability over the medium term and thereby creating the stable environment in which other policies can be most effective. In the absence of such recognition, the danger exists that the public would come to doubt the Eurosystem's commitment to maintaining price stability. Inflation expectations and risk premia would rise, increasing longer-term interest rates and raising the cost of investment required to produce sustainable and lasting increases in the standard of living.

In this respect, the Governing Council of the ECB is highly concerned about the current high level of unemployment in the euro area. However, this problem is overwhelmingly structural in origin. It is caused mainly by the inflexibility of euro area labour and goods markets resulting, in part, from excessive or inappropriate regulation in these markets. Structural economic reforms aimed at reducing these inflexibilities are the appropriate policy response. In those euro area countries where such reforms have been implemented, unemployment has fallen substantially. Effective euro area-wide structural policies would lead

Box 3

Transparency and accountability of the Eurosystem

In general, central banks should be open, transparent and accountable, reporting fully to the public on their activities, including their conduct of monetary policy. A transparent and accountable central bank reinforces its credibility by communicating clearly with the public and thereby signalling that its monetary policy is appropriately oriented to the maintenance of price stability. In this regard, the Eurosystem meets or exceeds the best practices of any central bank.

The President of the ECB will hold a press conference immediately after the first Governing Council meeting of every month. On these occasions, the President will present an extensive statement of the Council's view of the economic situation and the outlook for price developments, followed by a question and answer session. The schedule for these meetings and conferences has already been announced for 1999. This regular statement will be supplemented by the publication of a Monthly Bulletin. The Monthly Bulletin is intended to provide the general public and financial markets with a thorough assessment of the economic environment, as well as with articles about the economy's structure and topical issues important for the single monetary policy.

Furthermore, the Eurosystem's balance sheet will be published weekly. An annual report on the activities of the Eurosystem must be produced, supplemented by the production of quarterly reports. These reports are to be submitted to the European Parliament, the Council of Ministers and the Commission of the European Communities. The European Parliament will hold a general debate on the reports that it receives. The ECB President and Executive Board members have to answer questions posed by the European Parliament's committees. The President will appear before the parliamentary committee five times each year, following the submission of the quarterly and annual reports mentioned above.

In speeches, members of the Governing Council will also inform the public about monetary policy and the economy. Working papers and technical analysis by ECB staff will be published for professional review and scientific assessment. These articles and other presentations will address not only the central issue of monetary policy and the monetary transmission mechanism, but also the major economic problems facing Europe, not least the problem of the high level of unemployment.

Through all these media, the ECB is committed to communicating with the public in a clear and transparent manner. Against this background, the Eurosystem clearly demonstrates high levels of transparency and accountability.

to higher trend real growth. Within its monetary policy strategy, the Eurosystem would naturally take account of such higher growth. However, attempting to reduce unemployment by implementing an inflationary monetary policy would ultimately be self-defeating, since such a policy would only undermine price stability over the medium term, which is the basis for lasting and sustainable employment growth.

Transparency and accountability

All central banks operate in a certain social,

political and institutional environment. In a democratic context, it is vital that an independent central bank is open, transparent and clear about the reasoning for its actions, and accountable for its performance. Recognising the importance of these issues in the euro area, the Treaty imposes on the Eurosystem some of the most stringent reporting obligations required of any central bank. In practice, the Eurosystem has already committed itself to exceeding even these stringent requirements (see Box 3: Transparency and accountability of the Eurosystem).

2 The role of a monetary policy strategy

The primary objective of the single monetary policy is the maintenance of price stability. However, the Eurosystem, like all central banks, cannot control the price level directly by using the monetary policy instruments at its disposal. Instead, central banks face a complex transmission process from their own monetary policy actions to changes in the general price level. This transmission mechanism of monetary policy is characterised by the existence of several distinct channels, each with long, variable and not fully predictable lags. Moreover, the transmission mechanism itself is continuously evolving in response to changes in economic behaviour and institutional structure.

Because the transmission mechanism is complex, the preparation, discussion and presentation of monetary policy decisions must be placed in a coherent clarifying framework. This is the role of the monetary policy strategy. The strategy fulfils two crucial tasks.

- *First*, the strategy imposes a clear structure on the policy-making process itself. The strategy must ensure that the Governing Council has the information and analysis it requires to take effective monetary policy decisions that will maintain price stability. The Governing Council must work within a coherent analytical framework that allows developments in the economic environment to be mapped into appropriate decisions on the terms offered in the Eurosystem's open market operations and on its standing facilities. Using these instruments, the Eurosystem can exercise considerable operational control over short-term market interest rates, which then feed through to other economic variables and, ultimately, the price level.

- *Second*, the Eurosystem's monetary policy strategy is a vehicle for communicating with the public. Monetary policy is most effective when it is credible – that is, when the public is completely confident that monetary policy is fully committed to the objective of price stability and is being implemented in a manner that will effectively achieve this goal. Therefore, the monetary policy strategy must not only signal the overriding objective of monetary policy, but must also convince the public that this objective will be achieved.

In designing a monetary policy strategy to fulfil these two complementary roles, knowledge about how the economy works is essential. In particular, an awareness is required regarding the information about future threats to price stability that can be extracted from observing current developments in the economic situation; that is, the *indicator properties* of monetary, financial and other economic variables for price developments must be analysed.

Moreover, it is vital to understand broadly how monetary policy, through short-term nominal interest rates, will affect the economy in general and, ultimately, the price level. Understanding the transmission mechanism will help to allow judgements to be formed about whether the policy measures taken are appropriate to address the threats to price stability revealed by the indicator variables.

A monetary policy strategy is therefore a coherent and structured description of how monetary policy decisions will be made in the light of the behaviour of economic indicators, in order to achieve the overriding objective of price stability.

3 Criteria for selecting the monetary policy strategy of the Eurosystem

General criteria

In order to fulfil the aims described above, the Eurosystem's monetary policy strategy must satisfy certain general criteria. Foremost among these criteria is the principle of *effectiveness*. The best monetary policy strategy for the Eurosystem is the one which best ensures the achievement of, and signals a credible and realistic commitment to, the primary objective of price stability.

As discussed above, for a monetary policy strategy to be effective, it must be credible. In other words, the public in general, and the financial markets in particular, must be convinced that the Governing Council of the ECB is committed to maintaining price stability, has the instruments and expertise to do so, and is implementing monetary policy with this objective in mind.

In order to build a good reputation, and thereby the necessary credibility to implement the single monetary policy successfully and effectively, the Eurosystem's monetary policy strategy has to satisfy a number of other criteria.

- ◆ The strategy must be *clear* and *understandable*. If there is ambiguity about the objective of monetary policy or how this objective will be achieved, unnecessary uncertainty will be created in the minds of the public.
- ◆ Furthermore, the strategy must be *transparent*. The public must be presented *ex ante* with information about how monetary policy decisions are being made by the Governing Council and the economic rationale on which they are based.
- ◆ The strategy must ensure that the Eurosystem is *accountable* both for its policy actions and for its performance in achieving the primary objective of price stability. In the view of the Governing

Council, this entails the publication of a quantified objective against which the public can sensibly judge the performance of the Eurosystem and its single monetary policy.

- ◆ Finally, the strategy must be *consistent with the Eurosystem's institutional independence*.

The specific environment at the start of Monetary Union

In addition to the general criteria outlined above, certain important characteristics of the specific environment faced by the Eurosystem at the start, and in the early years, of Stage Three have also had to be taken into account.

Building credibility is particularly important for the ECB at the outset of Stage Three since it is a new institution, lacking an independent track record or reputation of its own. The participating NCBs that are components of the Eurosystem have, over the years, built up a strong reputation for maintaining price stability. By ensuring as much continuity as possible with the objectives and successful performance of the NCBs prior to Monetary Union, the Eurosystem can inherit this reputation, to the benefit of its credibility in the future.

However, the Eurosystem faces a unique situation at the start of Monetary Union. Of particular concern to the Eurosystem in these special circumstances are those uncertainties that inevitably arise as a result of the move to Stage Three itself. These relate, in particular, to the way in which the transition to Stage Three of EMU will affect economic behaviour, institutional structures and statistical series in the euro area.

The adoption of the single monetary policy marks a significant *regime shift*. The transformation of the institutional arrangements for deciding and implementing monetary policy will change the structure of important sectors

of the economy, especially the financial system. Moreover, the regime shift is likely to change the way expectations are formed in the euro area. This may already have been seen in recent years in many countries, where the adoption of a credible and lasting commitment to price stability has been stabilising longer-term inflation expectations at new, low levels.

As a consequence, empirical relationships between economic variables that have been estimated using data from the past may become unstable should behaviour change in this new environment. These changes may complicate the Eurosystem's assessment of economic conditions because the indicator properties of monetary, financial and other economic variables for future price developments may be altered.

As regards the structure of the euro area economy, behavioural changes at the outset of Stage Three might be particularly pronounced in the financial sector, where the impact of Monetary Union may be most immediate. For example, the behaviour of monetary aggregates which consist largely of bank deposits might be affected by the transition to Stage Three. The introduction of the euro could also lead to changes in the banking system and to private portfolio shifts between monetary and non-monetary assets.

However, structural and institutional change will not be limited to the financial system. In conjunction with the single market programme, the elimination of currency risk in the euro area will increase the transparency of pricing in goods and labour markets and thereby probably

raise the intensity of competition and innovation. More generally, consumption and investment behaviour may be affected by the regime shift to an environment of stable prices. In these circumstances, conducting macroeconomic analyses and forecasts will also be complicated, since the historical empirical relationships on which they are largely based may begin to break down.

These uncertainties arising directly from the transition to Stage Three itself will be both compounded by and inter-related with the broader economic context in which Monetary Union will be established. The increasing internationalisation of the global economy, and the current rapid pace of technological change, have affected all sectors of the economy. All these effects may change the properties of key indicator variables, which will therefore have to be interpreted with special caution and care.

Furthermore, in many respects, Monetary Union has created an entirely new economic area for which comprehensive and harmonised data have not been collected in the past. A number of fully, or almost fully, harmonised series are now available. These include the euro area monetary data, the balance of payments data and the Harmonised Index of Consumer Prices (HICP). However, these euro area-wide statistics are based, in part, on new concepts, and the properties of the series are not yet well known. Therefore, the uncertainty facing policy-makers concerning the indicator properties of the available euro area statistics is larger than has typically been the case in national contexts in the past.

4 The stability-oriented monetary policy strategy of the Eurosystem

Having considered various options on the basis of the criteria and considerations outlined above, the Governing Council of the ECB announced the Eurosystem's stability-oriented monetary policy strategy to guide its monetary policy decisions in Stage Three of EMU. The main elements of this strategy were presented to the public on 13 October 1998, and have

subsequently been elaborated in speeches and statements by the President of the ECB and other members of the Governing Council. The strategy consists of three main elements:

- ◆ a quantitative definition of the primary objective of the single monetary policy, namely price stability; and

- ◆ the two pillars of the strategy used to achieve this objective:
 - a prominent role for money, as signalled by the announcement of a reference value for the growth of a broad monetary aggregate; and
 - a broadly based assessment of the outlook for future price developments and the risks to price stability in the euro area as a whole.

The quantitative definition of price stability

The definition

The Governing Council has decided to publish a quantitative definition of price stability. A published definition gives clear guidance to expectations of future price developments, helping to build up the credibility of the new strategy. The publication of the Eurosystem's definition of price stability also provides the public with a clear indication for making its assessment of the success of the single monetary policy, thereby making the Eurosystem and its stability-oriented monetary policy strategy transparent and accountable.

Against this background, the Governing Council of the ECB has adopted the following definition: *price stability shall be defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2% . Price stability according to this definition is to be maintained over the medium term .*

The phrase *below 2%* clearly delineates the upper bound for the rate of measured inflation in the HICP which is consistent with price stability. At the same time, the use of the word *increase* in the definition clearly signals that deflation, i.e. prolonged declines in the level of the HICP index, would not be deemed consistent with price stability.

It should be noted that the Eurosystem's definition of price stability is in line with the definitions used by most NCBs in the euro area prior to the transition to Monetary Union,

ensuring an important element of continuity with their successful monetary policy strategies.

The HICP index

The chosen definition identifies the HICP as the price index that should be used in the assessment of whether price stability has been achieved and maintained. This index was initially created for the assessment of price convergence in Stage Two and is largely harmonised across the various countries in the euro area. Use of the HICP is also consistent with the public's usual focus on consumer prices in its assessment of developments in the price level.

Among economists in academic, financial and central banking circles, there is a broad consensus that various forms of so-called measurement bias can exist in consumer price indices (CPIs). These biases arise mainly from changing spending patterns and quality improvements in those goods and services that are included in the basket used to define a specific price index. Such biases cannot always be fully corrected in the construction of price indices. The measurement bias typically causes CPIs to overstate slightly the true rate of inflation.

The HICP for the euro area is a relatively new concept and long runs of back data do not exist. Therefore, studies of the magnitude of the HICP measurement bias are preliminary and inconclusive. Eurostat has expended considerable effort to reduce or eliminate the measurement bias in the HICP. It is therefore probable that the bias in the HICP is smaller than that observed in national CPIs of the countries comprising the euro area. Moreover, the available empirical evidence suggests that the measurement bias in national CPIs for euro area countries is smaller than that which has been estimated in a number of prominent studies of consumer price indices in other countries.

The success of these attempts to minimise the measurement bias in the HICP is as yet unknown. Furthermore, the size of the

measurement bias is likely to change over time as the structure of the economy evolves and statistical methods change, partly in response to these changes in economic structure. Therefore, the definition has avoided explicitly embodying specific estimates of the HICP measurement bias, while allowing for such bias by not setting the lower bound for measured price level increases at zero.

Finally, the Governing Council explained that, by defining price stability in terms of the HICP for the euro area, it has made clear that its decisions will be based on an assessment of developments in the euro area as a whole. With a unified monetary policy, policy decisions must be made in a manner that reflects conditions across the euro area in its entirety, rather than specific regional or national developments.

Medium-term orientation

The statement that *price stability is to be maintained over the medium term* reflects the need for monetary policy to have a forward-looking, medium-term orientation. It also acknowledges the existence of short-term volatility in prices, resulting from non-monetary shocks to the price level that cannot be controlled by monetary policy. The effects of indirect tax changes or variations in international commodity prices are good examples. The Eurosystem cannot be held responsible for these short-term shocks to the price level, over which it has little control. Rather, assessing the performance of the Eurosystem's single monetary policy over the medium term ensures genuine and meaningful accountability.

Furthermore, in response to some types of unforeseen economic disturbance with an impact on the price level that may threaten price stability, a medium-term orientation of monetary policy is important in order to permit a gradualist and measured response. Such a central bank response will not introduce unnecessary and possibly self-sustaining uncertainty into short-term interest rates or the real economy, while nevertheless ensuring that price stability

and the benefits that it brings is maintained over the medium term.

The two pillars of the strategy

The reference value a prominent role for money

Inflation is ultimately a monetary phenomenon. The Governing Council therefore recognised that giving money a prominent role in the Eurosystem's strategy was important. Money constitutes a natural, firm and reliable nominal anchor for monetary policy aiming at the maintenance of price stability. The important role played by money in the overall stability-oriented strategy also emphasises the responsibility of the Eurosystem for the monetary impulses to inflation, which a central bank can control more readily than inflation itself.

To signal the prominent role it has assigned to money, the Governing Council has announced a quantitative reference value for monetary growth as one pillar of the overall stability-oriented strategy. The reference value is intended to help the Governing Council analyse and present the information contained in the monetary aggregates in a manner that offers a coherent and credible guide for monetary policy aimed at price stability.

Two characteristics of the quantitative reference value for monetary growth should be emphasised.

- ◆ *First*, the reference value was derived in a manner that is consistent with and serves the achievement of price stability. To ensure that the reference value is consistent with the maintenance of price stability over the medium term, money must have a *stable* relationship with the euro area price level at this horizon. The stability of this relationship is typically assessed in the context of a money demand function, where a specific monetary aggregate is related to the price level and other macroeconomic variables, such as real income and interest rates.

- ◆ *Second*, substantial or prolonged deviations of monetary growth from the reference value would, under normal circumstances, signal risks to price stability over the medium term. This feature requires both that a stable relationship between money and the price level exists and that monetary growth is a *leading indicator* of developments in the price level.

However, the concept of a reference value does not entail a commitment on the part of the Eurosystem to correct deviations of monetary growth from the reference value over the short term. Interest rates will not be changed mechanistically in response to such deviations in an attempt to return monetary growth to the reference value. Therefore, the euro area monetary aggregate for which the reference value is announced does not need to be *controllable* in the short run, using a short-term nominal interest rate influenced closely by the Eurosystem. This is one of the main differences between setting a reference value and announcing an intermediate monetary target.

The available empirical evidence suggests that broad monetary aggregates (i.e. measures of money that include a wide spectrum of deposits, embracing time and savings deposits, as well as close substitutes for them, such as marketable short-term bank liabilities) exhibit the properties required for the announcement of a reference value. In the past, the demand for euro area broad money has been stable over the long run. Broad aggregates have been leading indicators of developments in the price level. This contrasts with the empirical properties of euro area narrow money, which, although controllable using short-term nominal interest rates, exhibited neither stability with nor significant indicator properties for the price level. Of course, this evidence has to be treated with some caution, given the statistical and economic uncertainties highlighted above. Nevertheless, the empirical evidence has been judged strong and robust enough for a reference value to be announced for a broad monetary aggregate. The Governing Council has chosen to announce a reference value for

the aggregate M3, defined in an encompassing manner to include not only currency in circulation and the conventional deposit components of broad money, but also both the shares/units of money market funds (MMFs) and debt securities issued by monetary financial institutions (MFIs). Conceptual and empirical aspects of the euro area monetary aggregates are discussed in more detail in an article to appear in the February 1999 Monthly Bulletin.

Against this background, the reference value for monetary growth has been derived using the well-known relationship between money, on the one hand, and prices, real gross domestic product (GDP) and the velocity of circulation, on the other. For prices, the derivation of the reference value has to be based on the Eurosystem's published definition of price stability. Furthermore, in view of the medium-term orientation of monetary policy, it is appropriate to base the derivation of the reference value on assumptions about medium-term developments in both real GDP and the velocity of circulation. In this respect, assuming trend growth for real GDP would tend to impart a counter-cyclical property to monetary policy, as GDP growth below trend would normally be associated with lower monetary growth relative to a reference value derived using trend output.

On 1 December 1998 the Governing Council announced its reference value for M3 growth. The derivation of the reference value was based on the following medium-term assumptions.

- ◆ Price stability must be maintained according to the Eurosystem's published definition, so that year-on-year increases in the HICP for the euro area are below 2%.
- ◆ The trend of real gross domestic product (GDP) growth lies in the range 2-2½% per annum.
- ◆ Over the medium term, the decline in the velocity of circulation of M3 is in the approximate range ½-1% each year.

In setting the reference value for monetary growth, the Governing Council emphasised that the Eurosystem's published definition of price stability limits increases in the HICP for the euro area to *below 2%*. Furthermore, the actual trend decline in velocity is likely to lie somewhat below the upper bound of its $\pm 1\%$ range. Taking account of these two factors, the Governing Council decided to set its reference value for M3 growth at 4% per annum.

The Governing Council decided to announce a specific reference rate for monetary growth, rather than a reference range, on the basis that announcing a reference range might be falsely interpreted by the public as implying that interest rates would be changed automatically if monetary growth were to move outside the boundaries of the range, something that would be contrary to the role of the reference value in the overall strategy.

The reference value will help to inform and present interest rate decisions aimed at maintaining price stability over the medium term. Therefore, in the first instance, a deviation of monetary growth from the reference value will prompt further analysis to identify and interpret the economic disturbance that caused the deviation. If this analysis suggests that the disturbance identified indeed points to a threat to price stability, monetary policy would respond in a manner appropriate to counter this risk. The relationship between actual monetary growth and the reference value will therefore be regularly and thoroughly analysed by the Governing Council. The results of this analysis and its impact on monetary policy decisions will be explained to the public. Through this process monetary policy decision-making will be made both clearer and more transparent.

While the presentation of monetary analysis to the public will naturally focus on developments in the key broad monetary aggregate M3 in relation to the published reference value for monetary growth, developments in other monetary aggregates, in the various components of M3, and in the counterparts to all these aggregates in the consolidated MFI

balance sheet will also be thoroughly assessed on an ongoing basis. Such analysis provides useful background information that helps the assessment of developments in M3.

A broadly based assessment of the outlook for price developments

Although the monetary data contain information vital to informed monetary policy-making, on their own they will not constitute a complete summary of all the information about the economy required to set an appropriate monetary policy for the maintenance of price stability. Therefore, in parallel with the analysis of monetary growth in relation to the reference value, a broadly based assessment of the outlook for price developments and the risks to price stability in the euro area will play a major role in the Eurosystem's strategy. This assessment will be made using a wide range of economic indicators.

This wide range of indicators will include many variables that have leading indicator properties for future price developments. These variables include, *inter alia*, wages, the exchange rate, bond prices and the yield curve, various measures of real activity, fiscal policy indicators, price and cost indices and business and consumer surveys. Obviously, it will also be useful to look at inflation forecasts derived using all these variables when assessing whether the monetary policy stance is appropriate. In this respect, the Eurosystem will evaluate the full range of inflation forecasts produced by international organisations, other authorities, market participants, etc., and will also produce its own assessment of the future inflation outlook.

However, given behavioural, institutional and structural uncertainties, forecasting price developments in the euro area is inevitably difficult. Inflation forecasts will have to be interpreted with caution and care. Moreover, a forecast cannot encompass all the indicator variables that are important for monetary policy. Nor can it always incorporate indicators in a timely manner. Therefore, a thorough analysis of individual indicator variables plays an

important role in the overall broadly based assessment of the outlook for price developments, in addition to any role these variables may have in the forecast. Both forecasts and the analysis of individual indicators will help to inform the Governing Council about the specific nature of the macroeconomic environment and the disturbances to the economy, on which monetary policy decisions would normally depend.

Based on its strategy, the Governing Council has undertaken to offer full and prompt explanations of its assessment of overall economic conditions, including the economic rationale on which it is based. This will present the public with a transparent view of monetary policy-making.

5 Concluding remarks

The Eurosystem's stability-oriented monetary policy strategy, as described above, is a new and distinct strategy, which reflects the unique circumstances and institutional environment that will face the Eurosystem.

The stability-oriented strategy emphasises the overriding priority attached to the maintenance of price stability according to a quantitative definition published by the Eurosystem. The strategy aims to identify those economic disturbances that threaten price stability, and to prompt a monetary policy response which addresses these threats and which is appropriate to both the prevailing economic circumstances and the nature of the threat. The strategy recognises that reliance on a single indicator variable or intermediate target is unlikely to prompt the appropriate response in all circumstances. In particular, mechanical responses to a small number of indicators or forecasts at the start of Stage Three may be especially misguided, given the inevitable uncertainties about economic relationships prompted by the regime shift associated with the transition to Monetary Union.

The stability-oriented monetary policy strategy therefore eschews mechanistic monetary policy responses to deviations from a specific

target or developments in a specific indicator variable. Instead, a thorough analysis of the monetary data in relation to the quantitative reference value for monetary growth and a broadly based assessment of other economic data will be conducted, with the aim of identifying the economic developments and disturbances that pose a threat to price stability. This analysis will then inform the selection of an appropriate monetary policy response geared to the maintenance of price stability over the medium term.

This strategy requires considerable effort on the part of the Eurosystem to explain its assessment of the economic situation. The Governing Council is committed to exceeding the reporting and communication requirements outlined in the Treaty, which are already among the most stringent imposed on any central bank.

Against this background, the Eurosystem's stability-oriented monetary policy strategy will ensure that price stability over the medium term is maintained in a credible and lasting manner throughout the euro area. This is the best contribution that the single monetary policy can make to raising the standard of living of Europe's citizens.