

## **Yves Mersch: Reflections on the eurosystem's monetary policy strategy after four years**

Speech by Mr Yves Mersch, Governor of the Central Bank of Luxembourg, at the 33rd ISC-Symposium, St. Gallen, Switzerland, 23 May 2003.

### **Introduction**

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 but faces a complex transmission process. Because the latter 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. It must ensure that the Governing Council has the information and analysis required by an effective monetary policy that will maintain price stability. Second, the monetary policy strategy is a vehicle for communicating with the public. Monetary policy is most effective when it is credible. The strategy must therefore facilitate the communication of decisions taken and convince the public that the objective will be achieved.

In October 1998 the ECB Governing Council announced that the Eurosystem would adopt a monetary policy strategy consisting of three key elements. The first element was a quantitative definition of price stability. The second and third elements were the "two pillars" of the strategy used to achieve this objective, namely the assignment of a "prominent role to money" and a "broadly based assessment of the outlook for price developments and risks to price stability". The Eurosystem took the position that policymaking should not become dominated by inflation-forecast-targeting type preoccupations. Eurosystem monetary policy, thus, does not react mechanically to a forecast at a fixed horizon but rather tailors the policy response depending on the nature of the shock hitting the economy. This is documented by its medium-term orientation and reflects why the medium-term has not been defined quantitatively. As the single monetary policy faces uncertainty about the functioning of the economy, the robustness of information stemming from various sources is checked. Furthermore, policy decisions are based on a judgment on the likelihood of certain scenarios occurring. The distinct character of the two-pillar strategy is also stressed by the announcement of a reference value for monetary growth signalling the prominent role assigned to money. On the contrary, strong focus on a single inflation forecast would not do justice to the complexity of the decision-making process and at the same time not be a transparent means to communicate this complexity. Overall, projection exercises provide a main element within the second pillar, but they do not offer an all-encompassing summary device.

Four and a half years have elapsed since the announcement of the Eurosystem's monetary policy strategy. These years provide a wealth of information, in terms of direct experience and of views by external observers. In December 2002 the President of the ECB announced that the Eurosystem would conduct an extensive analysis of its strategy. The evaluation encompassed a thorough assessment of comments from academics, analysts and journalists. In plain analogy with the majority of the comments received, the evaluation process focused on three aspects, namely a) the definition of price stability, b) the role of money and c) the two-pillar architecture.

### **1. The definition of price stability**

The Treaty (Art. 105.1) assigns to the Eurosystem the primary objective of maintaining price stability. On 13 October 1998 the ECB Governing Council defined price stability 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". Critics mainly addressed three aspects of this definition, namely the choice of the price index, the choice of the quantitative value for the objective and the format of the definition.

## **1.1 The choice of the price index**

### *The HICP*

For the purpose of setting a quantitative objective for monetary policy, a price index should embody a number of essential properties, such as credibility, reliability, timeliness and frequency. The HICP was initially created for the assessment of price convergence in Stage Two of EMU and is largely harmonised across euro area countries. It scores particularly high in the above criteria. There is no controversy in that Eurostat provides a high quality price index at international standards.

### *Headline inflation versus core inflation*

The choice of the headline measure has the advantage of transparency: It provides the measure that most closely approximates the price of a representative basket of consumption goods and services purchased by euro area households. In theory, core inflation represents an appealing concept in that it filters out the more volatile components and/or temporary factors, which should be disregarded for monetary policy purposes. In practice though, measures of underlying inflation may lack credibility with the public. Furthermore, there is no unique method to derive such measures and different measures often provide very different figures. In any case, the medium-term orientation of the Eurosystem's monetary policy strategy ensures that the Governing Council will duly discount short-term price volatility in its deliberations.

## **1.2 The choice of the quantitative value for the objective**

The announcement of a quantitative definition of price stability is an essential element of the Eurosystem's monetary policy strategy. It provides a clear and measurable benchmark against which the public can hold the Eurosystem accountable. It enhances the transparency of the monetary policy framework, and gives guidance to expectations of price developments, thereby helping to stabilize the economy. Ultimately, any assessment of the appropriateness of the specific quantitative value requires weighing off the costs of inflation and the rationales for tolerating small positive inflation rates.

### *The costs of inflation*

Recent evidence confirms a negative and significant effect of inflation on long-term growth, even at moderate rates of inflation. Furthermore, inflation has been found to negatively affect aggregate welfare through a number of channels, such as non-indexed tax systems, nominal rigidities, distortions in relative prices, income redistribution, "shoe-leather costs", excessive financial sector growth, inflation uncertainty, risk premia etc. Evidence that has become available since the inception of the Eurosystem strategy suggests that the costs of inflation may be higher than previously thought and that even moderate rates of inflation could entail significant costs.

### *The rationales for tolerating small positive inflation rates*

Nevertheless, a number of considerations suggest that maintaining a moderate positive rate of inflation would be desirable. These relate to the presence of measurement bias in the price index, the existence of downward rigidities in labour and goods markets, sustained inflation differentials across euro area countries and the existence of a lower bound for nominal interest rates.

### *Measurement bias*

Inflation may be subject to a positive measurement error, due to a number of sources (e.g., substitution bias, quality bias, outlet bias and new good bias). Assuming a positive measurement bias, an environment of very low inflation may hide a situation of 'de facto' deflation. However, the level of uncertainty surrounding the possible bias remains very high. With respect to the HICP, however, the continuous improvements implemented by Eurostat suggest that the measurement bias is likely to be very small and to further decline in the future.

### *Downward nominal rigidities*

In the presence of limited downward flexibility in prices and nominal wages, the economic adjustment to shocks may become too sluggish. A small positive inflation rate may "grease" the real adjustment if workers show resistance to nominal wage cuts. According to more recent evidence, however, the importance of downward nominal rigidities in the euro area is limited (trend towards flexible wage

components; likely to decline in sustained low inflation environment and/or with structural reforms; positive trend productivity growth). If downward nominal rigidities were pervasive, it is unclear whether monetary policy should accommodate them in the setting of the policy objective since this could make them even more 'entrenched'.

#### *Sustained inflation differentials across euro area countries*

It is acknowledged that inflation in countries at the lower end of the inflation distribution under price stability in the area as a whole seems to be quite low. Sustained inflation differentials may result for different reasons ("Balassa-Samuelson effect"; flexibility of markets; price level convergence; etc.). The current assessment for the euro area, however, suggests that the magnitude of the Balassa-Samuelson effect is rather small, even after enlargement. In addition, the price stability definition refers to the euro area as a whole and inflation dispersion most probably will be observed in virtually any monetary area. Regional deflationary spirals seem to be extremely unlikely as long as there is no deflationary spiral in the area as a whole.

#### *The zero lower bound in nominal interest rates*

Maintaining a small positive inflation rate rather than strict price stability reduces the probability of approaching very low levels of nominal interest rates. Such a safety margin is desirable, as the event of hitting the zero lower bound is linked to a diminished effectiveness of monetary policy and a higher risk of a deflationary spiral. The Japanese experience of protracted financial and monetary instability, however, can not be directly transposed to the euro area. Furthermore, evidence from simulation exercises indicate that the likelihood of hitting the zero lower bound of nominal interest rates and/or experiencing a deflationary spiral is rather small when the inflation objective is above 1%.

### **1.3 The format of the price stability objective**

Here, the discussion refers to two separate aspects, namely the issue of symmetry in the objective and whether it is preferable to specify the objective in the form of a range for allowable inflation rates or in terms of a specific rate of inflation.

#### *Symmetry*

There seems to be a perception of a lack of symmetry in the Eurosystem's definition of price stability, as it clearly defines an upper bound at below 2%, while not explicitly mentioning a lower bound. Asymmetry could entail two types of difficulties. Firstly, it may have led to an excessive focus by the public on the 2% upper-mark as a benchmark for future developments in financial contracts and wage negotiations. In fact, inflation expectations indeed have settled close to the upper bound. The lack of a more precise aim within the existing definition may make it more difficult for the Eurosystem to maintain price stability. Secondly, a lack of symmetry may not be conducive to the clarity of communication, especially when the arguments for lowering policy rates need to be explained. However, the Eurosystem clarified a) that the use of the word "increase" excludes deflation and b) that the lack of an explicit lower bound acknowledges the existence of an unknown and possibly time-varying measurement bias in the HICP.

#### *Range versus focal point*

The choice between setting the objective of price stability by means of a range or a specific rate of inflation is subject to certain trade-offs. Critics of the current format suggest that a single point rate of inflation has stronger signaling properties. However, international evidence suggests that, once the objective embodies a quantitative announcement, its use in the form of a point or a range for admissible inflation rates makes no appreciable difference for firmly anchoring long-term inflation expectations. One advantage of a range is that it signals the uncertainty regarding the optimal inflation rate and conveys to the public the message that the control of inflation is inherently imperfect. This may be conducive to the credibility of the central bank: It contributes to limiting its accountability for moderate variations in inflation over the short term. Furthermore, a range is fully compatible with a gradual shift in the optimal inflation rate due to permanent shifts in productivity growth or other structural shocks. On the other hand, a range could be interpreted as a zone of indifference, with policy responding only when inflation approaches the edges. If a range is announced around the point target, it is important that the edges are interpreted as "soft-edged" and not as triggers for policy, thus allowing for a gradual and medium-term approach to monetary policy.

### *The definition of price stability: main conclusions*

The review of the definition of price stability has confirmed its overall successful performance within the Eurosystem's strategic framework. Inflation expectations are perfectly compatible with the definition of price stability. Small and declining volatility of long-term inflation expectations document the successful anchoring of inflation expectations in the euro area. The analysis has shown that there is no viable alternative to headline HICP inflation for defining the primary objective. At the same time, the Eurosystem will continue to monitor measures of "underlying inflation" as indicator variables in the context of regular analysis and in external communication.

However, the Governing Council wished to further clarify the existing definition of price stability. To this end, the Governing Council agreed that in the pursuit of price stability it will aim to maintain inflation rates close to 2% ("from below") over the medium term. This clarification underlines the Eurosystem's commitment to provide a sufficient safety margin to guard against any major risks of deflation. It also takes due account of the possible presence of a measurement bias in the HICP and other factors, the implications of inflation differentials within the euro area. In addition, it perfectly reflects the medium-term orientation of the single monetary policy.

## **2. The role of money**

Inflation is ultimately a monetary phenomenon. The Governing Council therefore recognized that giving money a prominent role was important. Two properties were identified in October 1998 justifying a prominent indicator role for a monetary aggregates, namely its leading indicator properties for price developments and its stable relationship with its long-run determinants (notably the price level, real income, interest rates). Both properties triggered criticism and it was important to review whether the underlying conditions are still satisfied.

### *The leading indicator property of money*

A large number of studies confirm that empirical evidence continues to support that broad monetary aggregates have important indicator properties for euro area inflation. The leading indicator properties of money are optimal at medium to longer-term horizons. There is also evidence that narrow monetary aggregates have leading indicator properties for cyclical developments. And finally, careful analysis of money and credit growth may provide early information on the development of financial instability in addition to other indicators. Such information is of relevance for monetary policy as the emergence of financial imbalances or bubbles could have a de-stabilising impact on activity and, ultimately, prices in the medium term.

### *The stability of money demand*

The relevance of monetary aggregates for the conduct of monetary policy hinges on the long-run stability of money demand. There is substantial evidence suggesting that long-run euro area money demand is stable. This finding is robust with respect to a number of methodological issues (aggregation method, sample period, etc.). However, the empirical work has shown that over the most recent period, there were signs of instability in the short-term mechanism by which deviations of the demand for M3 from its long-term equilibrium are corrected. At present, information from various sources (Balance of Payments, Financial Accounts) suggest that current developments in the demand for M3 in the euro area seem to be associated with a heightened preference for liquidity induced by an exceptionally prolonged period of asset price volatility.

However, it may not be taken for granted that stable money demand will last endlessly. One concern relates to possible future structural changes in the composition of wealth due to the increased sophistication of private investors. Historically, instability was primarily due to financial innovation or tax changes affecting the relative net return of holding money. However, there have not been significant changes in any of these factors recently which would justify to expect a continued instability in money demand.

### *The role of money: main conclusions*

Broad money reveals strong leading indicator properties for developments in prices. Narrow money aggregates have leading indicator properties for cyclical developments. Excess money and credit growth may provide early information for identifying financial imbalances and/or asset price bubbles, which ultimately may impact on price developments. At present, there is no evidence suggesting that

the long-run link between money and prices has become obsolete. Both conditions motivating the assignment of a prominent role to money, thus, are still satisfied. However, monetary growth has been subject to substantial volatility in the short-run. Against this background, the Eurosystem will continue with its monetary analysis to interpret short-term trends in monetary aggregates with caution and to conduct studies on money demand.

### **3. The two-pillar architecture**

The Eurosystem's monetary policy strategy was designed to take account of the uncertainty monetary policy faces about the functioning of the economy. To this end, a twin pillar architecture is employed in organizing, assessing and cross-checking all information relevant for an assessment of the risks to price stability. Within the first pillar, the Eurosystem has announced a quantitative reference value for the growth rate of M3, as a benchmark against which monetary developments can be assessed and described to the public. Analysis under the second pillar focuses on the short-to-medium-term risks to price stability. It is based on a broad range of information about wages, commodity prices and exchange rates, asset prices, wealth, external demand, fiscal policy, and domestic financing conditions and costs. The Eurosystem's approach to structuring its analysis under two pillars was innovative. Not surprisingly, it triggered many discussions as well as criticism. The latter focused on the reference value and the co-existence of two distinct pillars.

#### ***The first pillar and the use of the reference value***

Much of the criticism owes to an overly simplistic understanding of the first pillar as a simple comparison between observed monetary growth and the reference value. Contrary to much journalistic discussion, however, M3 growth away from the reference value over shorter periods may not be interpreted as a policy failure. In fact, the relationship between interest rates and monetary growth is complex, it may vary over time and it is shock specific. Most importantly, monetary policy actions are not geared to returning M3 growth to the reference value as quickly as possible, but to achieving the objective of price stability over the medium term.

It seems that M3 has been more sensitive to short-term developments in financial markets than one may have expected. As a consequence, monthly changes in M3 growth became quite volatile and measures of short-term trends in monetary aggregates have to be interpreted with caution. Most importantly, in order to overcome the limited signalling properties of money in the short-run, the scope of monetary analysis has been enriched over time and goes well beyond the narrow study of deviations between the growth rate of M3 and its reference value. The monetary analysis undertaken by the Eurosystem consists of a comprehensive assessment of the liquidity situation based on information from a large number of sources, ranging from Monetary and Banking Statistics to Balance of Payments and Financial Accounts. It involves a thorough analysis of components of monetary aggregates (in particular M3 and M1) as well as their counterparts from both MFI liabilities and MFI assets (in particular loans to the private sector). Various money gap measures, concepts of excess liquidity and monetary models are used to identify the factors underlying the developments in money and credit and to best extract the information contained in money for longer term price developments.

#### ***Monetary analysis and the reference value: main conclusions***

The Governing Council acknowledged the need to communicate more convincingly the enriched scope of monetary analysis and stressed the rich choice of data and methods used. To underscore the longer-term nature of the reference value as a benchmark for assessing monetary developments, the Governing Council decided to no longer conduct a review of the reference value on an annual basis. Importantly, the reference value for M3 is based on medium-term assumptions for real GDP growth and velocity. The mere announcement of the annual review, however, unintentionally seems to have affected expectations. Its legend annual review appears to have added to the misperception that the reference value is announced "for a specific year" and to confusions with an annual targeting of M3 growth. The Governing Council agreed to continue to assess the stability properties of money demand and the validity of the assumptions underlying the reference value with respect to trends in income velocity and output growth. The Governing Council will change the reference value if necessary. However, the experience has shown that the underlying assumptions change over longer periods only. The Governing Council therefore refrains from announcing a specific frequency at which the reference value will be reviewed.

### ***The co-existence of two pillars***

The twin pillar architecture triggered a good deal of criticism, much of which seems to neglect the specific merit of the twin architecture. First, the two-pillar strategy perfectly reflects the difference in the time perspectives relevant for analysis under the economic and the monetary analysis. It is widely acknowledged that long-term price movements are driven by trend money growth, while higher frequency inflation developments appear to reflect the interplay between demand and supply conditions at short- to medium-term horizons. From the perspective of central bankers, the kind of information provided by both the economic and the monetary analysis is equally relevant, but differs qualitatively.

Second, the two-pillar architecture serves as an instrument to organise and convey information to the Governing Council and the public. At present, monetary phenomena are not fully captured by conventional economic models. The two-pillar structure represents an analytical commitment on the part of the Eurosystem to ensure the robustness of monetary policy by taking due account of different paradigms in policy considerations.

Third, the two-pillar architecture serves as a communication device. It allows conveying monetary policy decisions and the underlying rationales to the public in a most transparent manner. Empirical evidence suggests that nowadays interest rate decisions by the Governing Council are very well anticipated by market participants.

### ***The co-existence of economic and monetary analysis: main conclusions***

Economic and monetary analysis operate under different time horizons. The Governing Council wishes to clarify communication on the cross-checking of information in deriving its unified overall judgement on the risks to price stability. To this end, the introductory statement of the President will henceforth follow a new structure.

It will start with the economic analysis to identify short- to medium-term risks to price stability. As in the past, economic analysis is based on further developments in structural models, tools and models in forecasting, etc. It will include analysis of shocks hitting the euro area economy and projections of key macroeconomic variables. The Governing Council recalled that since the inception of the single monetary policy the economic analysis has been deepened. The Governing Council confirmed the importance of projections, but also recalled that they will not exhaust the economic analysis.

The monetary analysis will then follow to assess medium to long-term trends in inflation in view of the close relationship between money and prices over extended periods. It will take into account developments in the extended range of monetary indicators including not only M3, but also its components and counterparts, notably credit, and various measures of excess liquidity (money gaps, monetary overhang, etc.). In essence, monetary analysis mainly will serve as a means of cross-checking, from a medium- to long-term perspective, the short to medium-term indications coming from economic analysis. This cross-checking ensures that monetary policy has a nominal anchor beyond the conventional projection horizon.

The Governing Council confirmed that both, the short-term assessment from economic analysis and the medium- to long-term assessment based on monetary analysis lead to a compound single assessment. This single assessment is the fundament of Governing Council decisions. This new structure of the introductory statement better illustrates that the two perspectives offer complementary analytical frameworks to support the overall assessment of risks to price stability.

### **Overall conclusion**

To sum up, the strategy evaluation by and large confirmed the key elements of the existing strategy. In different fields, the decisions taken by the Governing Council ensure a high degree of continuity: First, the Governing Council continues to reject a strategy of inflation targeting. Second, the strategy will continue to entail three main elements, namely a quantitative definition of the primary objective of price stability and the "two pillars" of the strategy used to achieve this objective. Third, the quantitative definition of price stability continues to refrain from rejects a corridor for inflation outcomes. Fourth, the type of analysis undertaken under both economic and monetary pillars is unchanged.

Within the existing framework, though, the Governing Council undertook distinct clarifications. First, the quantitative definition of price stability has been clarified by defining the aim of the Eurosystem

within the existing definition (i.e. close to 2% "from below"). Second, by restructuring the introductory statement of the President the Governing Council has – and will continue to do so – clarified the scope of the enriched monetary analysis and its use in monetary policy making as a means of cross-checking. In order to avoid confusion with monetary targeting and to stress the long-term character of the reference value, the Governing Council decided to no longer conduct its review on an annual basis.