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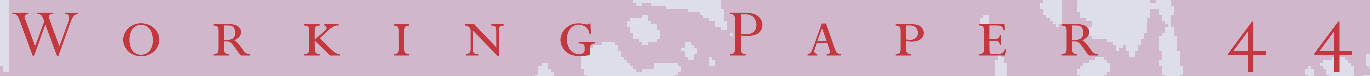

The Euro Area and the Single Monetary Policy

Otmar Issing

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Editorial

On April 19 - 20, 2001 the Oesterreichische Nationalbank sponsored a Workshop organized by Richard Clarida (Columbia University), Helmut Frisch (TU Wien) and Eduard Hochreiter (OeNB) on „Exchange Rate and Monetary Policy Issues“. It took place at the Institute for Advanced Studies, Vienna. A number of papers presented at this workshop is being made available to a broader audience in the Working Paper series of the Bank. This volume, which contains the key note speech by Otmar Issing, is the first of a collection forthcoming in the Working Paper series.

May 1, 2001.

1. Introduction[1]

Thank you for inviting me to speak in this assembly of distinguished academic economists.

This conference is especially interesting for me, because it indicates potential dangers hidden in the future of the euro area and of the single monetary policy. As a policy maker, part of my job is to hope for the best but always prepare and be ready for the worst. Let me thank you for providing insightful analyses into the potential difficulties lying ahead.

Nevertheless, let me confess that I cannot avoid feeling uneasy when I hear people pointing out the risks, sometimes even the certainty, of future disasters about to occur in the euro area. The reason is that the history of the European monetary unification is characterised by slow, but steady, progress in the face of constant scepticism and predictions of catastrophes. During the times when the Maastricht Treaty was being finalised, many observers considered Stage Three of the introduction of the Economic and Monetary Union as an infeasible and unlikely leap in the dark – and, to be honest, I have to confess that I myself was not known for being an euro-enthusiast either. Traditional considerations based on the optimum currency area literature were often used to criticise the concept of monetary union in Europe. And there were widespread beliefs that the necessary political consensus would never possibly have formed around the idea of a voluntary relinquishing of monetary independence on the part of national authorities. National interest would allegedly have prevailed over the wider common interest.

These criticisms appeared to be validated at each occurrence of a large shock, be it the German unification or the ERM crisis. Even in 1998, when the launch of the euro was supposedly only a matter of time, there were observers suggesting that financial markets would strain and eventually prove unsustainable the promise of an irrevocable locking of bilateral central parities. Then, sceptics noted the historically unique situation created by the asymmetry between, on the one hand, a single central bank and, on the other, eleven – twelve as of January 2001 – national governments. More recently, the criticism centred on the most difficult initial decision

[1] Prof. Otmar Issing is member of Executive Board of the European Central Bank. This is the Key Note speech he held at the workshop on "Exchange Rate and Monetary Policy Issues", Institute for Advanced Studies, Vienna, April 19th, 2001. The author would like to thank Oreste Tristani for his valuable contribution.

of the European Central Bank, the development of a monetary policy strategy suitable for the new environment of Monetary Union. The ECB strategy was described as inappropriate for the euro area, too opaque, inconsistent with the economic thinking currently in fashion and ultimately conducive to bad monetary policy.

Against this background, you will allow me to stress that the launch of the single monetary policy was a resounding success.

The changeover to the euro was fault free. New evidence unveiled by recent studies – one of which will be presented immediately after my talk[2] – confirms that financial operators learnt to cope with the new money market in the matter of few weeks. The introduction of the new currency was absorbed and understood without substantial glitches. After criticising our monetary policy strategy under a number of angles, most commentators now agree that it was ultimately conducive to good policy decisions. Financial markets accord us the degree of credibility which is necessary for effective central bank actions.

Let me be clear. I do not intend to prove myself a fool here, stating that European integration will never again encounter difficulties and occasional setbacks ever again in the future. On the contrary, we will no doubt experience problems, for example in the process of enlargement of the European Union, which is an important goal but calls into question the entire institutional structure of the union. The single monetary policy will also be affected by the accession of new members. However, I want to remind us all that in a few months, on 1 January 2002, the euro will become a tangible currency, notes and coins in the hands of hundreds of millions of European citizens rather than only a unit of account. As the symbolic climax of the process leading to the creation of the single currency, the cash changeover will be another sign of the success of European integration.

2. The track record

[2] Vitor Gaspar: The ECB Monetary Policy Strategy and the Money Market. Forthcoming in this Working Paper series.

In its short history, the single monetary policy has contributed to ensure this success. In the face of nontrivial shocks occurring in the recent past, I think I can claim that the practical performance of the ECB strategy has been adequate so far. Two and a half years ago, at the start of the single monetary policy and in the face of the exceptional degree of uncertainty implied by the change to the new policy environment, we could hardly have hoped in a better outcome.

Policy outcomes, i.e. the track record, are what the public must ultimately hold the central bank accountable for. In this respect, the institutional setting provided by the Treaty and the initial decisions of the Governing Council have paved the way for a full accountability of the ECB to the European citizens.

The Treaty specifies the objectives to be pursued by the ECB establishing a clear hierarchy, where price stability is unambiguously assigned overriding importance. This provision reflects a broad consensus existing in the economic discipline that the maintenance of price stability is the appropriate objective of monetary policy. The consensus is rooted in the belief that monetary policy makes its best contribution to overall economic welfare by maintaining price stability – and thereby allowing the price mechanism to work more efficiently. This proposition is strongly supported by a very broad economic literature investigating the medium-term relationship between real economic growth and price developments, both across countries and across time.

Let me emphasise, in passing, borrowing a terminology proposed in the literature, that the ECB enjoys “instrument independence”, but not “goal independence”. The primary objective of the ECB is mandated by the Treaty – it has not been chosen by the Governing Council. The governments and parliaments of the Member States of the EU – representing the people who elected them – have made this choice and have also decided to give the primary objective of price stability constitutional status by enshrining it in the EU Treaty.

Having been assigned the mandate to maintain price stability, the ECB – in view of its desire to be both transparent and accountable – could not simply have remained silent on how it interprets this concept. Consequently, drawing on the successful experience of those central banks that later formed the Eurosystem, in October 1998 the Governing Council of the ECB decided to publish a quantitative definition of price stability, both as a focus for inflation expectations and to provide a clear

yardstick against which the public, its elected representatives and agents in the media, could hold the ECB accountable. The Governing Council defined price stability as an annual increase of the Harmonised Index of Consumer Prices for the euro area of below 2%.

Many considerations went into the formulation of this definition, including theoretical and statistical issues, such as the potential existence and magnitude of so-called measurement bias in consumer price indices. Nonetheless, one point was clear. The ECB had no option other than to define its primary objective in a way that deemed inflation rates above 2% inconsistent with price stability. By and large, this had been the implicit or explicit objective used by the national central banks prior to the irrevocable fixing of intra-euro area exchange rates at the start of January 1999. At the outset of Monetary Union with the introduction of a wholly new currency, it was extremely important that the public was reassured that the environment of price stability, which had been successfully established through the convergence process in the 1990s, was here to stay.

The only difference with respect to the pre-EMU past is that price stability is now to be maintained *in the euro area as a whole*, which does not necessarily imply at any time *in each and every country* composing the area. A year-on-year increase in the Harmonised Index of Consumer Prices for the euro area of below 2 per cent represents price stability, according to the definition given by the Governing Council, even if increases in national indices happen to be above 2 per cent in some of the countries of the area. National differences should be seen as entirely analogous, in this respect, to differences between the various components of the headline index. Likewise the slowly decreasing price of some telecommunication utilities, to make an example, does not represent a structural risk of deflation, so should regional inflation differentials not be considered as a necessary source of problems. In both cases, the differentials may be reflecting the appropriate economic adjustment to the temporary insurgence of disparities in productivity growth or to the realisation of other asymmetric shocks.

In this context, one possible motivation for the insurgence of prolonged inflation differentials across countries is related to the Balassa-Samuelson effect. On theoretical grounds, this effect is clearly understood as leading to higher inflation in countries experiencing faster productivity growth in the tradable goods sector and faster wage inflation. From an empirical viewpoint, however, uncertainties, related to the measurement and comparability of productivity in different countries and to the

definition of tradable and non-tradable sectors, render extremely difficult a precise measurement of the Balassa-Samuelson effect in terms of basis points of inflation. It is for this reason that the effect is typically mentioned mainly in relation to emerging countries, which are catching-up fast.

Nevertheless, based on estimates exclusively for labour productivity, it has recently been argued that the Balassa-Samuelson effect would indeed be currently playing a large role within the euro area, and that a large portion of cross-country inflation differentials should allegedly be considered as structural. These estimates do not appear robust since they rely on a specific sample period, on a specific definition of productivity and on the assumption that productivity differentials run along national borders. Indeed, other studies show that these can be observed also at the regional level and that they are not more pronounced in the euro area than in other monetary areas. Moreover, at least some of the observed inflation differentials observed in Europe in recent years have proven to be temporary in nature.

However, it is certainly conceivable that the inflation rate of one country in the area may at some point – and not necessarily because of the Balassa-Samuelson effect – start diverging from the area average in a persistent manner. This sort of structural divergence may easily grow and become unsustainable once ignited. For given and equal policy interest rates across the area, a higher inflation rate in one country would lead to a more expansionary policy stance in the same country, thus to further inflationary pressure and wider inflation differential. In the end, the painful adjustment process would have to take place through the loss of competitiveness and the stabilising role of the full freedom of international trade within the common market.

The risk of structural inflation differentials was well-known even before the start of the monetary union and it was acknowledged to represent a reason for concern. It was also immediately clear from economic theory, however, that, in any such circumstance, the single monetary policy could not be expected to play any role in the adjustment because the ECB is not in the position to influence the dispersion of inflation within the area.

Recent claims that the Governing Council should revise upwards its definition of price stability in order to avoid tolerating deflation in countries with slower productivity growth are simply not grounded on solid theoretical grounds. Applying a similar argument, should monetary policy not be required to prevent “deflation” also in every region of the area? But then, why not also in each and every town?

While growing and unsustainable inflation differentials may indeed become a reason for concern in the euro area, one should not confuse relative price adjustments with changes in the price level. Even if a reduction of prices were to occur at some point in the future in any individual country of the European monetary union, its consequences would be very different from those of deflation in the whole area. The zero bound on nominal interest rates, to mention an often-quoted problem related to deflation, would not be binding in the first case, as area wide inflation would remain positive.

Should large and growing inflation differentials emerge in the euro area, national policy-makers would need to respond. National fiscal policies would have to perform a crucial role through the action of automatic stabilisers. Social partners would also need to contribute to the adjustment, which amounts to ensuring that wage developments be consistent with domestic price stability and high employment.

It is for these reasons that it is important not to stop, but to speed up the process of fiscal consolidation and structural reforms. An increase in the overall flexibility of labour, product and capital markets would enhance the capacity of individual economies to absorb shocks, of idiosyncratic or common nature. Sound public finances are the necessary prerequisite to provide scope for the automatic stabilisers to play a role in helping the adjustment process.

Armed with the quantitative definition of price stability for the euro area provided by the Governing Council, anyone can promptly assess whether the headline HICP inflation rate is compatible with the definition of price stability. For example, it is clear that, at this point in time, the euro area is not at price stability. The primary responsibility of the Governing Council in this economic juncture is therefore to ensure that the current deviation from price stability will prove to be a transitory phenomenon and that price stability will soon be restated in the euro area.

The track record of the ECB, however, cannot be assessed on the basis of temporary deviations from price stability caused by external and unavoidable shocks. In view of the lags with which monetary policy affects the economy, a central bank cannot ensure price stability at each and every moment in time in the face of exogenous shocks. In its announcement of 13 October 1998, the Governing Council explicitly acknowledged this, and clarified that “price stability is to be maintained over the medium term”.

In this respect, it is noticeable that the ECB has constantly secured the confidence of investors and financial markets in the sustained maintenance of price stability in the euro area. This appears to be confirmed by a broad range of indicators, including developments in the price of nominal and index-linked long-term bonds, shorter-term expectations and forecasts by a number of institutions, and finally survey evidence.

What makes this success satisfying is that it has been achieved in what has often been a difficult and uncertain environment. First, the introduction of the euro itself, which has no doubt changed – and continues to change – the way expectations are formed in the euro area, thereby altering forward-looking economic behaviour. The whole transmission mechanism of monetary policy to developments in prices is likely to have been more or less affected by this regime shift.

Moreover, the introduction of the euro took place in the aftermath of the Asian and Russian financial crises of 1997-98, which served to weaken external demand and increased uncertainty. The uncertainties related to the regime shift associated with the transition to Stage Three of the European Monetary Union were obviously heightened by the contemporaneous occurrence of these economic shocks.

Another source of shocks directly contributing to determine inflationary developments in the past two years has been the exchange rate, specifically the prolonged weakness of the euro against the dollar. Prolonged episodes of depreciation or appreciation are hardly an exception in the life of any currency. Nevertheless, an extended phase of undervaluation is particularly dangerous for a currency at the very beginning of its life, because it can undermine the confidence of investors. The ECB's capacity to command credibility in spite of the weakness of the euro is particularly remarkable in this perspective.

Finally, we have recently witnessed a period of exceptional volatility in international energy prices. Over 1999 and 2000, oil prices in dollars have almost tripled, before starting to edge down towards the end of last year. The immediate repercussions of these developments on HICP prices have been substantial and are still producing their effect, most recently compounded with exceptional dynamics of food prices.

If, in spite of these developments, the ECB's track record can indeed be judged to have been positive so far, large part of the merits must be attributed to the effective way in which we organise our analyses of the available information and structure our

decision-making process. These characteristics identify the essence of our stability-oriented monetary policy strategy.

In the rest of my remarks, I would like to concentrate on the recent innovation in the communication policy of the ECB, namely the publication of the staff economic projections. I will start discussing the concept of transparency, which is well defined in abstract and general terms, but very difficult to pin down and apply to the monetary policy domain. I firmly believe that the ECB has always been highly transparent, even if its model of communication has sometimes been misunderstood and criticised, and that we can already see some signs of the high degree of mutual understanding that we have established with the markets. I will then argue that this model of communication has not been altered to any extent by the recent publication of the ECB staff projections. Although a recent event, the publication had been pre-announced a long time ago, and it has only been delayed until December 2000 to ensure the necessary technical and procedural preparations. Provided that the exact nature of the staff projections is clearly understood, their publication should contribute to reinforce further the already high degree of mutual understanding reached between the ECB and the public at large.

3. Transparency in practice

A good approach to monetary policy must not only ensure that policy makers receive all the information necessary to take appropriate decisions in a structured and coherent form. It must also constitute a clear framework for communication with financial markets and the general public, so as to allow the central bank to explain the economic rationale at the base of monetary policy decisions in a consistent manner over time.

The latter requirement – the need to ensure transparency of the policy making process – is of no lesser importance than the first – the need to process efficiently all the information and knowledge relevant for appropriate policy decisions. In a democratic society, a high degree of transparency and accountability in monetary policy making reinforces the legitimacy of the central bank and consolidates the public support for its price stability mandate. Moreover, transparency imposes discipline on policy makers and is a means to ensure a general understanding of the monetary policy strategy. In turn, this may add to the credibility, and thereby the

effectiveness, of monetary policy, hence facilitating the central bank's effort to attain its statutory objectives.

There can therefore be no doubt that transparency is an important requisite for any central bank. However, while it is easy to agree on this general principle – transparency is an important element of monetary policy – its application to the modern central banking practice is far from straightforward.

The reality of monetary policy decision making is extremely complex. At each point in time, the economy sends apparently conflicting signals, seemingly validating different models or views of the world depending on occasions and circumstances. These signals are inevitably incoherent with, and impossible to summarise according to, any simple, elegant and internally consistent theoretical framework. The degree of complexity of the decision making process is intensified for those central banks, prevalent in large monetary areas, governed by collegial bodies.

Willing to describe the best collective assessment emerging from each meeting of the Governing Council in an honest, clear and synthetic manner is a daunting problem which necessarily lacks a straightforward solution. It is only natural that different approaches, depending on a myriad of circumstances and considerations, may be explored by different central banks, in spite of the common nature of the aim to achieve transparency of their decision making process. Moreover, transparency must be seen as a goal that can only be reached to a certain degree, always leaving scope for – perhaps minor - improvements and enhancements. It would be simplistic to even conjecture that a unique and – let me use the key word – "optimal" route to transparency may exist *independently* of any particular characteristic of the relevant monetary area or of the preferences of the policy makers. A number of idiosyncratic variables ought to have a bearing on the way a central bank communicates with its specific public.

Yet, it remains my impression that many comments and criticisms of the communication policy of the ECB are based on a fundamental belief that such a unique and optimal route to transparency exists, and that its crucial properties are that the internal inflation forecast of the central bank should be published and that monetary policy should react mechanistically to deviations of the forecast from the objective at a prespecified horizon. Sometimes, transparency according to this model becomes a binary variable – one, if the forecast is published, or zero, if it is not. I could not disagree more strongly with this viewpoint – which by the way is

neither philosophy nor practice of any major central bank – and I continue to be convinced that, in terms of transparency, the ECB can emerge proudly from the comparison to any other leading central bank.

Like other central banks, the ECB had to tailor its communication policy to the particular challenges it faces and to the diverse needs of its many target groups. The euro area now consists of twelve different sovereign nations, each with its own distinct monetary history and heritage. The ECB must communicate with the public of twelve different countries and must speak in all the official languages of the EU. Different requests, in terms of nature and quantity of information, come from financial market participants, political bodies and organisations, the academic profession and the public at large. In addition to the direct communication with any of these groups through the organisation of specific events or publications, a significant role in the process of disseminating information is played by the media.

Being tailored for the central bank of a new, large and complex economic area, the communication policy of the ECB attributed an important role to the press conferences directly following the first Governing Council meeting of each month, including the question-and-answer session in which representatives of the media have direct access to the President and Vice-President. At the centre of the ECB communication policy stands also the Monthly Bulletin, which intends to provide the general public and financial markets with a more thorough assessment of the economic environment.

The explanations we give in the aforementioned contexts are entirely comparable with what other central banks call minutes. In some respects – such as timeliness – the approach adopted by the ECB is clearly superior.

The other instruments of the ECB communication policy are well known. In public speeches, members of the Governing Council address specific audiences within the euro area and beyond. A broader audience is reached through interviews given by members of the Executive Board to newspapers and magazines. Last, but not least, participation by members of the staff of the ECB in academic conferences provide us with an important opportunity to improve and qualify our explanations of the ECB strategy and of our policy actions.

However, we have decided not to publish individual voting records. And for good reasons. There is an undeniable danger that, if published, individual voting records would foster the development of a monetary policy discussion couched in national

terms, thereby hindering the required development of an area-wide view, and that they may also expose Governors to national political pressures.

The degree of transparency of the ECB appears suited to the diverse needs and specific challenges of the environment in which it operates. Indeed, we see signs of constant improvements in the public's understanding of our strategy and decisions, also thanks to fruitful exchanges of views and discussions with many observers and watchers from different professions.

Measuring the degree to which financial markets, and the public at large, understand our strategy and the reasoning behind policy decisions is certainly not an easy task. However, after more than two years of the *single* monetary policy, we have a few policy events that have been studied to draw some indirect inference on transparency. One possible way to approach this issue is to analyse the predictability of the monetary policy decisions taken by the Governing Council. If the stability-oriented strategy were indeed too complex and ultimately not transparent, as claimed by some of our critics, then we should expect monetary policy decisions to be very imperfectly forecasted and, *ex post*, imperfectly understood by the markets. We should therefore expect a relatively high degree of volatility in the price of financial assets around the dates in which policy decisions were taken, in contrast to a "normal" degree of volatility if the strategy is well understood.

It goes without saying that the finding of a good predictability of policy decisions does not represent hard evidence in favour of transparency. Transparency and predictability should indeed be kept conceptually distinct. In principle, one could observe that policy moves of a highly transparent central bank are difficult to predict, for example during periods of particularly high uncertainty of the economic environment. Similarly, a relatively opaque central bank can make itself predictable by simply pre-announcing its policy decisions.

Nevertheless, the observation of a smooth absorption of monetary policy news into market prices does not contradict the hypothesis of the emergence of a mutual understanding between the central bank and financial markets. Again, the presentation that will follow my talk[3] will show evidence that our monetary policy moves have indeed been reasonably well forecasted and understood. In spite of the alleged intricacies of the two-pillar strategy and in spite of the lack of publication of

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[3] Vitor Gaspar: op.cit.

the internal forecast over the period analysed, there are no signs of special difficulties faced by the ECB in the area of communication.

4. External communication and the publication of macroeconomic projections

Faithful to its explicit commitment to transparency, on 16 November 2000 the Governing Council announced its decision to publish the economic projections for the euro area prepared by the staff of the Eurosystem. Projections related to economic developments up to 2002 appeared for the first time in the December issue of the ECB Monthly Bulletin, which also clarified a number of procedural characteristics and methodological issues.

Projections are produced under the responsibility of the staff of the whole Eurosystem, not simply of the ECB. The Monetary Policy Committee of the ECB, which brings together experts from both the ECB and the National Central Banks (NCBs), is in charge of producing projections twice a year, in the spring and in the autumn. The results are presented to the Governing Council for its meetings at the beginning of June and December. The involvement of the Monetary Policy Committee ensures the greatest interaction between ECB and NCB staff experts.

I should emphasise that our decision to publish the staff projections is not the signal of a late discovery of the importance of forecasting in monetary policy at the ECB. Forecasts, both internal and calculated by other organisations, have always played an important role in our decision making process. Already in the early days of Stage Two of the introduction of the monetary union, the European Monetary Institute had decided to devote resources to build the relevant databases and started thinking about the structure of the macroeconometric models that were deemed necessary for the single monetary policy. In the end, the importance of projections in the ECB strategy derives immediately from its forward-looking orientation.

Nor has the decision to publish the staff projections been an afterthought. As early as in April 1999, during his hearing at the European Parliament's Sub-Committee on Monetary Affairs, the President announced that we would have published the internal projections at some point in the future. A period of development and testing was however necessary in order to ensure that the existing suite of models employed in the calculation of the projection were reasonably well behaved, that

they did not show signs of structural breaks around the launch of the single monetary policy, and that they could reasonably be trusted to provide sensible information for the Governing Council.

The publication of the staff projections reflects the desire to share with the public an important piece of information available to the Governing Council for the sake of transparency. I am hopeful that macroeconomic projections will indeed contribute to improve the presentation and explanation of the ECB's monetary policy decisions. For this to be the case, however, it was important to signal clearly, at the time of publication, both the assumptions underlying the projections and the role that they play in the policy process.

The Eurosystem's macroeconomic projections are produced using a number of inputs. First, a variety of macroeconometric models of the euro area are used to provide analytical support. They supply a detailed structure for the projections, ensuring that they are internally consistent and that the relationship between projected variables are in line with economic theory and econometric evidence. Second, the projections produced by these models are influenced and adjusted using the technical judgement of staff experts both at the ECB and at the NCBs. They bring into the picture detailed knowledge of the institutional contexts and specific information on country and sectoral assessment, obtained partly with the help of reduced-form equation systems, but generally integrated in a judgmental fashion.

In spite of all these efforts, however, projections only provide a counterfactual scenario, which aims to facilitate the discussion during the Governing Council by pointing out the consequences of a lack of monetary policy actions over the projection horizon. It should therefore also be clear that projections do not represent the ultimate synthesis of the Government Council's assessment of the euro area inflationary outlook. Projections do not incorporate all the information and knowledge we have on the functioning of a monetary economy such as the euro area. Most significantly, they are based on standard mainstream economic frameworks and, as such, they do not accord a special role to money, in spite of the abundant evidence of a strong link between money and prices beyond very short-term frequencies.

Projections are therefore only one of the inputs provided to the Governing Council in order to inform its decisions. The final and fully informed assessment of the outlook

for price developments and risks to price stability, which is consistent with the monetary policy decisions, remains the preserve of the Governing Council.

I believe that this "division of responsibility" between the staff and the Council is not only efficient from a procedural viewpoint, but also conceptually sound. From a procedural viewpoint, the staff is free to make its best judgement of the current situation and of its implications for future inflation, without the heavy burden of having to reconcile potentially conflicting inputs coming from different Council members. Conceptually, this procedure reflects the idea that two different stages can be identified in the decision making process. First, there is an evaluation of the current and prospective state of the economy, which should be unbiased and possibly unaffected by pre-existing inclinations towards some kind of decision. Second, there is the ultimately subjective assessment of the implications that the state of the economy has for price stability, with the ensuing policy decision.

Putting the Governing Council in charge of forecasting would imply an attempt to collapse into one these two stages of the decision making process. The consequence would be to empty of substantial content the policy discussion during Council meetings. Decisions would *have to* be consistent with the Council's own forecast, so the substance of the policy debate, on how to counter the potential deviations from price stability projected in the forecast, would be transferred to the forecasting process. But if forecasting and decision making coincide both logically and chronologically, how can one avoid that forecasts are biased in order to be consistent with whatever policy move was deemed appropriate *ex ante*? Can this be considered a model of transparency?

To summarise, staff projections do not play, in the ECB strategy, the role that they are attributed in some models. Namely, they do not represent the final and synthetic assessment of the outlook for price developments and risks to price stability to which policy decisions should directly be related in those same models. After all the ECB has always claimed explicitly not to be following an inflation forecast targeting strategy! But I wonder whether any central bank really does, since there are clear pitfalls in a strategy exclusively relying on inflation forecasts. In my opinion, these pitfalls are comparable to those of a strategy exclusively relying on money.

In terms of decision making, I believe that it is impossible, in the real world, to relate any given policy move only to the deviations from price stability forecasted at a certain future horizon. Monetary policy moves will be determined by information,

both “hard” and judgmental, on the evolution of a number of “state” variables and shocks to the economy. For given projected deviations from price stability, it is possible that different moves will be implemented depending on the ultimate source of the “inflationary shock” and its perceived degree of persistence. As a result, the forecast cannot be treated as a simple and all-encompassing variable whose knowledge is sufficient, provided a clear definition of price stability exists, to formulate policy.

In practice, moreover, the use of forecasts as summary statistics has the drawback that forecasts hinge on assumptions that can only be selected for lack of a better alternative, rather than because of their perceived appropriateness. An often-mentioned example of such an assumption concerns the time horizon. Our forecasting ability typically forces us to limit our horizon to approximately 2 years ahead, but it is not clear that this is the maximum lag at which monetary policy affects the economy. As a result, reacting to projected deviations from price stability at a maximum two-year horizon could lead to an excessively activist policy, which keeps steering the economy before past policies have finished to produce their effects.

For related reasons, however, relying solely on forecasts also creates problems of communication. If the purpose is to present and explain to the public, then a forecast is mostly useful when it is a projection conditional on unchanged interest rates, since the central bank can use this scenario to justify the policy moves necessary to obtain a different outcome. This is indeed the way in which many central banks do present their internal forecasts. By construction, however, these projections cannot represent the best assessment of the governing body of the central bank on future outcomes, since such an assessment would incorporate planned future policy actions. Again, the tension arises between the use of the forecast as input into the decision-making process, on the one hand, and an honest and transparent representation of the output of that process, on the other hand.

This tension is exacerbated in the case of collective decision making bodies. Committees or Councils are composed by individuals who are typically different in terms of experience and background, but who share the commitment to a common goal, defined in the mandate of the central bank. A wealth of different competencies and knowledge is an advantage with respect to the case in which the responsibility for monetary policy making is entirely attributed to a single person. It helps in the discussion and interpretation of the analyses and inputs provided by the staff,

including the macroeconomic projections, and it is therefore conducive to a fully informed assessment of the outlook for price developments and the risks to price stability.

A direct implication of collective decision making is that the interaction between different members of the Committee or Council plays a crucial role in shaping the policy debate. This interaction tends to improve the quality of policy decisions, since the process of building consensus around them represents an insurance against the risk of major mistakes. This also implies, however, that decisions will never be certain *ex ante*, even if each individual's view prevailing before the meeting were known. The various perceptions existing *ex ante* on the current and prospective evolution of monetary, economic and financial variables in the economy will tend to evolve during meetings, as previously downplayed facets of reality are brought again to the common attention by other Council members.

How to honestly and transparently provide an account of the collective decision making process is certainly a complex task. Individual views on the outlook for price developments will typically remain slightly differentiated after the policy discussion. The assessment of the degree of uncertainty of the outlook at each future point in time and even the potential skewness of the elements of uncertainty will also typically be different. How can one trust any aggregate but simple representation of these different, and eminently judgmental, views to be honest and transparent and to clearly portray the collective assessment of the Council?

I believe that the answer to this question has already been given by those central banks that are actively trying to follow the pure inflation forecast-targeting model. These central banks have learnt from experience that forecasts have not always proven to be consistent with policy decisions and that, in those cases, they are unhelpful to explain decisions *ex post*. Obviously, refinements and improvements are always possible, and often needed, in any monetary policy strategy. Nevertheless, I would claim that these refinements inevitably move the strategy away from a pure model in which the forecast has an overriding and all-encompassing role in the policy process.

In order to clarify the limited role played by internal forecasts in the policy process, the ECB preferred the term "projections" to the more commonly used "forecasts." This choice emphasises that the figures published in the Bulletin are not to be interpreted as the best internal prediction of the future evolution of the selected

economic variables. More precisely, projections are conditional on, amongst other assumptions, the hypothesis that short-term interest rates will remain unchanged over the projection horizon. While the concept of a conditional forecast may be perfectly clear to experts, it was important to also explain to a broader audience that projections disregard by assumption any future monetary policy action to contain anticipated threats to price stability. It was also important to clarify that, on the contrary, the Council will always be ready to act to counter any source of risks to price stability.

Finally, it was important to convey to the public the limitations of mainstream economic models and of economic forecasting. Accordingly, the ECB has decided to publish projection ranges rather than point values. It was decided to base the width of the range on the average absolute errors made in previous NCB and Eurosystem projections. The adoption of ranges represents a transparent and realistic manner to reflect the uncertainties always surrounding future developments, which increase as the projection horizon lengthens. At the same time, the absence of a mean, or modal, value should avert the risk of portraying an unrealistic picture of our knowledge of those uncertainties. Since projections are not strictly model based, ranges attempt to summarise the uncertainty on the realisation of future shocks, and to also convey the conjectural nature of many assumptions and judgements implicit in the projection.

5. The monetary policy strategy of the ECB

The publication of economic projections of the staff of the Eurosystem does not imply any change in the ECB's monetary policy strategy. In particular, the role of projections in decision making will be unaffected.

Projections are helpful to boil a large quantity of information down to a few indicators. Even if policy discussions do typically go back to most of the original information used – together with conditioning assumptions – to construct them, projections remain helpful to structure the policy debate around the evaluation of future outcomes.

However, staff projections are always evaluated in the context of other analyses and indicators, including forecasts produced by other organisations and financial market expectations, for example as embedded in bond yields. This is consistent with the

complex structure of the ECB's strategy, which aims to provide the Governing Council with the best possible insight into the economic situation.

While learning from the experiences and successes of other central banks, the ECB strategy recognises the novelty of the environment for monetary policy making in the euro area, and acknowledges the high level of uncertainty which was an inevitable result of the introduction of the new currency.

A broad range of empirical and theoretical findings were therefore taken into account for the design of the strategy, as is also discussed more extensively in the forthcoming book, written jointly by three members of the ECB staff and myself, entitled "Monetary Policy in the Euro Area". Most importantly, it was decided to give the appropriate relevance to the lack of consensus about the structure of the economy and in particular the functioning of the monetary policy transmission mechanism. Economists also acknowledge this lack of consensus and, as a consequence, favour a number of diverse models and frameworks. Views and approaches are systematically updated as supposedly stylised facts quickly evolve into accidental and short-lived relationships. Each model is an approximation of reality that captures some important aspect of economic behaviour at some point in time. Each model is, however, "globally" mis-specified, in the sense of being blatantly inadequate when used as a complete and exhaustive representation of the world.

In a situation of particularly high uncertainty, as a result of the introduction of the single currency, and of lack of consensus on the most appropriate model of the economy, a strict adherence to any one framework – not just to make a contribution to the economic literature, but for policy analysis and decision making – would have been grossly unwise and imprudent. It would have carried the risk of fostering substantial policy mistakes if the selected framework neglected those aspects of economic behaviour that could turn out to play an important role.

In this context, a well-designed monetary policy has to be "robust" to different frameworks and models. Given the definition of price stability, which is one of the key elements of the ECB strategy, the single monetary policy should ensure that price stability is likely to be maintained over the medium term in a variety of relevant possible settings or models of the economy, rather than narrowly focus on trying to pursue the notion of optimality within one specific framework.

One implication of the need to take robust policy decisions is to adopt an eclectic and diversified approach to guide policy judgements, incorporating as broad a range of data and analyses as is feasible. This approach will reduce the risks of making large policy errors. The structure of the strategy adopted by the ECB provides precisely this diversified approach and thus far has avoided – at least to my biased judgement - making mistakes. This marks a not insignificant achievement in the environment of pervasive uncertainty, which we faced at the beginning of Monetary Union.

The prominent role of money reflects the basic tenet that ultimately inflation is always a monetary phenomenon. In order to signal this prominent role, a reference value for the growth of a broad monetary aggregate was announced to the public. In general, the prominent role assigned to money implies that the ECB is committed not to disregard the information content of monetary and credit aggregates, as this information can be expected to prove useful in forward-looking monetary policy decisions aimed at the maintenance of price stability over the medium term. As an additional signal of the willingness to use also analyses based on frameworks attributing a prominent role to money, this area of analyses and models has been defined as a pillar, namely the “first pillar” of the stability-oriented strategy of the ECB.

What is the prominent role of money in practice? What has been its relative contribution in the overall assessment of the outlook for price developments and the risks to price stability? It is obviously difficult to make this assessment at this still early stage of Monetary Union. Nevertheless, with the benefit of hindsight, one can say that monetary analysis in general, and the signals given by “headline” growth rates of key monetary aggregates in particular, have proven more reliable guides for monetary policy decisions than many external observers anticipated when the strategy was announced two years ago. Of course, this does not ensure that the information provided by monetary aggregates will never be distorted by sizeable money demand shocks or special factors. But this is exactly why the Governing Council has always clarified that it will not react in a mechanistic way to monetary developments and that a careful reading and analysis is always needed.

In addition, the strategy provides for the need to cross-check the analyses attributing a prominent role to money with those based on other approaches. In the ECB jargon, a “second pillar” is also explicitly included in the strategy, implying that analyses based on a broad variety of models would also play a major role in the

final assessment of the outlook for price stability. We decided to group these analyses under the second pillar because they can be identified by a common thread: monetary and credit aggregates do not play a major role.

As a result, all economic variables find a role in the strategy, from monetary to credit aggregates, from labour market indicators, including wages and unit labour costs, to fiscal and international developments and to financial market indicators, such as the yield curve and stock prices.

As the ECB's macroeconomic projections rely on structural macroeconometric models, they should be seen as forming part of the second pillar of the ECB's strategy. It should be clear, however, that they do not represent the final outcome of analyses grouped under the second pillar. The reason is that they fail to include a wealth of information that is indeed relevant for the assessment of the outlook for price stability and for policy decisions. As an example, one can mention, trivially, the information is released after the projection has been finalised. Since judgmental components and informal discussions are important elements contributing to shape the outcome of the staff projections exercise, the incorporation of news into the process and the need to ensure that the outcome remains internally consistent necessarily take time. Additional pieces of evidence typically difficult to integrate in the projection, but nevertheless taken into account in the analyses under the second pillar, are those related to some survey or qualitative data. Moreover, the assumptions on which projections are based – such as the assumed paths of oil prices or external demand – can change rapidly, causing the projections to become quickly outdated. As a result, the second pillar, let alone the overall strategy, cannot be characterised as an application of inflation forecast targeting.

6. Concluding remarks

In spite of the particularly difficult and uncertain environment we faced in the past (more than) two years, our experience with the stability-oriented strategy has been positive thus far. This is not an insignificant achievement.

Like all central banks, we constantly strive to improve our communication with the external environment. Provided that the role of projections in our strategy is properly understood, I am hopeful that the publication of our staff projections will help in our presentation and explanation of policy decisions. This will contribute to increase

further the high standard set by the ECB in the field of transparency and accountability.

But in the end, our final goal is to ensure that price stability is maintained in the euro area over the medium term. All our decisions must be instrumental to the achievement of the final goal. They are only appropriate if our track record remains consistent with price stability over the relevant horizon. The high degree of credibility that the ECB has commanded in financial markets right from the beginning of the single monetary policy is a fundamental precondition to ensure that price stability will be a permanent feature of the euro area.

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1) vergriffen (out of print)
2) In abgeänderter Form erschienen in Berichte und Studien Nr. 4/1990, S 74 ff
3) In abgeänderter Form erschienen in Berichte und Studien Nr. 4/1991, S 44 ff
4) In abgeänderter Form erschienen in Berichte und Studien Nr. 3/1991, S 39 ff
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