Otmar Issing: The watchers conference - theory and practice of monetary policy

Speech by Mr Otmar Issing, Member of the Executive Board of the European Central Bank, at a conference jointly organised by the Center for Financial Studies and the European Central Bank, Frankfurt am Main, 5 May 2006.

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Theory and practice

My long journey from the theory to the practice of monetary policy – the title of an ECB colloquium in mid-March – has come to an end. The Watchers Conferences have been an important part of this journey in recent years. In one way or another, these conferences have always focused on the relationship between, on the one hand, theoretical advances in and, on the other hand, practical challenges for the design and implementation of monetary policy.

In my last contribution to this event I would like to address three issues: the role of monetary analysis, our two-pillar approach and some observations on "monetary policy activism".

The role of monetary analysis

Over the past eight years, one of the most active debates that we have conducted at this Watchers Conference has concerned the role of money in the ECB's monetary policy strategy and interest rate decisions. In recalling these lively debates, I am reminded of the fairy tale "Goldilocks and the Three Bears": some of you have argued that the role of money in the ECB's strategy is too large; others have argued that it is too small; while I have typically responded that it is "just right".

We have learnt a lot from these open debates and even more from the practical experience of designing and implementing the single monetary policy. Nonetheless, I continue to affirm my initial view. I remain as convinced now as I was in October 1998 that the "prominent role" assigned to money in the ECB's strategy is a crucial component of our overall stability-oriented approach, which has proved very successful through the often challenging circumstances of the past eight years.

Some important empirical findings for the euro area have been reported earlier in this session. To recall briefly:

- There is a robust empirical relationship between the "low frequency" or "longer-term" movements in monetary growth and inflation.
- Developments in the low frequency component or underlying trend of money growth lead those in inflation with a lag of two to three years – that is, at a horizon that is typically considered relevant for monetary policy decisions, given the lags in monetary transmission.
- The observed monetary data are contaminated by "noise" at higher frequencies and influenced by many other factors over the business cycle. These factors serve to blur the underlying relationship between money and prices when observed on a short-term basis.

On the basis of these empirical regularities, the ECB has developed a framework for extracting the "signal" in monetary developments that is relevant for policy assessments from the inevitable "noise" in the monthly data. In other words, the framework tries to identify the low frequency component of monetary dynamics which helps predict inflation over longer horizons. This framework embodies both statistical and judgemental elements and has necessarily pursued a pragmatic and evolutionary approach.

This framework has proved remarkably successful. In particular, the real-time analysis derived from monetary developments (and I would like to stress the words "real-time") has correctly predicted the average level of inflation since 1999 – something that conventional macroeconomic forecasts have conspicuously failed to do. For a central bank assigned responsibility for the maintenance of price stability and adopting the appropriate medium-term orientation, it is difficult to imagine a more crucial indicator. The monetary analysis has served us well in this regard.

Of course, one can claim that the strong empirical performance of money over recent years is a coincidence or fluke. One can argue that the sample period available is too short for scientific judgements to be made. I cannot refute these points. But they apply equally to any indicator or framework. Given the empirical properties of money – not just in Monetary Union, but stretching back decades and even centuries – I strongly believe that the burden of proof lies with those who argue against any important role for money in the ECB's monetary policy strategy.

The empirical and conceptual principles underlying our strategy have been faithfully reflected in our policy discussions and decisions. Some question this. They argue that the relationship between interest rate changes and the annual rate of M3 growth is non-existent or even negative.

From the outset, the ECB has argued that a prominent role for money in its strategy did not imply a mechanical relationship between monthly out-turns for annual M3 growth and policy decisions. As I have already mentioned, the policy-relevant signal in money is in the low frequency or persistent component of monetary developments. The challenge is to identify in real time this underlying trend in monetary growth, which – at any specific moment – may differ in size and/or direction from developments in the annual M3 growth rate. Moreover, precisely because it is the persistent part of money that is relevant for policy decisions, the monetary signal is unlikely to change from month to month or even quarter to quarter. It is therefore unlikely to provide a determining trigger for a specific policy action in, say, December rather than January. Instead it influences the path of policy rates over time.

The course of monetary policy in the euro area reflects these arguments. Between 2001 and 2003, strong M3 growth was accounted for largely by portfolio shifts. Underlying trend monetary expansion was deemed more modest than reflected in headline M3 dynamics. Thus the monetary analysis did not constitute an impediment to interest rate cuts in that period. By contrast, the strengthening of M3 growth in 2004 and 2005 was seen as more fundamental in nature. As evidence in support of the view that the underlying pace of monetary expansion was increasing accumulated over time, the monetary analysis signalled increasing risks to price stability over medium to longer horizons. Monetary analysis thus provided a signal for the tightening of monetary policy seen in recent quarters.

To sum up, perhaps I can quote Adam Smith – one of the greatest economic philosophers. He said: *"The theory that can absorb the greatest number of facts, and persist in doing so, generation after generation, through all changes of opinion and detail, is the one that must rule all observation."* The relationship between money and prices surely passes this test. While we certainly cannot rely on money alone as a guide for monetary policy, we certainly cannot ignore it.

Why two pillars?

At the outset of Monetary Union, we decided that assigning a prominent role to money in the analysis underlying policy decisions was crucial. As I have said, our experience over more than seven years provides ample support for this decision. However, giving a prominent role to money raises the question of how the monetary analysis should be combined with other forms of analysis in coming to an interest rate decision. As I wrote in a recent *Financial Times* article: while central banks should not neglect the important information contained in monetary developments, equally their policy decisions should not rely on money alone.

The ECB's two-pillar strategy is precisely an approach which tries to meet this hardly deniable challenge. Experience has shown that this structure is an efficient way to organise our monetary and economic analyses. There are two, related reasons for this.

- First, while using the same set of underlying data and economic information, the monetary analysis and the economic analysis address different time horizons and thus give different perspectives on the challenges facing monetary policy in assessing future risks to price stability.

One set of sources of risks to price stability – such as developments in import prices (for example energy prices), changes in administered prices and indirect taxes, wage dynamics, and so forth – have an impact on the prices of goods and services in the shorter term, say within a year or two. A comprehensive assessment of these risks is made by the ECB in the context of its "economic analysis" – one pillar of its monetary policy strategy.

Other sources of risks – notably monetary developments – have implications for the outlook for price stability at medium to longer horizons. Extracting the policy-relevant information about longer-term

trends in inflation contained in monetary data is the core task of the ECB's "monetary analysis" – the other pillar of its strategy.

It is not that one form of analysis is better or more important than the other. It is simply that they are *different*. The two-pillar structure acknowledges the difference in perspective; by keeping the two perspectives as separate pillars, the clarity and coherence of each is enhanced. At the same time, the two perspectives are *complementary*: the value of each is enhanced by comparing it, or as we say "cross-checking" it, with the other.

- Second, assigning prominence to the monetary analysis ensures that the information contained in monetary and credit aggregates is always given appropriate weight in both internal and external discussions of monetary policy. The economic analysis has a focus on how various shocks drive business cycle developments. These are of course very important in setting the course of monetary policy. But, by their nature, the impact of these shocks on business cycle dynamics largely dissipates over time. Thus, focusing exclusively on the economic analysis runs the risk that key indicators of longer-term trends in price developments are neglected.

Ensuring that price stability is preserved over the medium to longer term is the fundamental task of monetary policy; indeed, this is the primary objective defined in the ECB's mandate. Given the robust link between trends in monetary growth and trends in inflation, a prominent role for money in the strategy provides insurance that the ECB does not "take its eye off the ball" and get distracted from its most important task.

It is useful to place our experience in a wider context. Over the past few years, we have observed that money and credit are gradually returning as subjects of academic research and, here and there, also to the practice of central banking. At the ECB conference held in March, which was attended by leading academics and central bankers from all over the world, many contributions acknowledged the need for an important role for money in monetary policy-making and macroeconomic analysis, although opinions differed on how best this should be achieved. Overall, one sensed a widespread understanding and appreciation of the ECB's approach. I do not claim that the ECB has found *the* solution to embodying the assessment of monetary developments within the framework for monetary policy decisions. But, obviously we have acknowledged this challenge and have done our best to meet it.

The two-pillar strategy is the result of the reflection on the different time horizons of economic and monetary developments as sources of risks to price stability. As such, I recognise that the two-pillar framework is a second-best solution, which explicitly acknowledges the lack of a model which encompasses both dimensions. From the outset, I have seen this two-pillar approach as a challenge not only for us at the ECB, but also to academic researchers. Research has been confronted with the task of developing an approach which would unite these elements into a single model, a single assessment of risks to price stability or if you wish a single "pillar". In my view, we may still have to wait quite some time before this task is complete – but nobody would be happier than me if we could celebrate success in this odyssey sooner rather than later.

Monetary policy activism

Finally let me turn to another question which has become prominent in recent monetary policy debates, namely whether the ECB has been appropriately "activist" in the face of temporary shocks to the euro area economy.

The success of the ECB's monetary policy in keeping inflation close to the objective of price stability and establishing stable long-term inflation expectations is widely recognised. At the same time, however, the ECB has repeatedly been confronted with the critique that its monetary policy has been too passive, not sufficiently activist or excessively gradualist.

This, it is argued, seems particularly true when the ECB policy since early 2001 is compared with that adopted by the US Federal Reserve. According to this view, the ECB has done "too little, too late" in supporting or smoothing economic activity during the recent period of weak economic growth.

In this context, observers often refer to the low degree of dynamism of the ECB's policy rate. For example, over the years 2001 to 2003 the Fed reduced the target for the federal funds rate from 6.5% to 1%, while the adjustment in the euro area was more modest, with the policy interest rate falling from 4.75% to 2% over the same period. Since mid-2004 the Fed has raised its policy rate by a cumulative

375 basis points, while the ECB started to raise rates only in late 2005 and since then has increased them by 50 basis points.

Against this background, I would like to address the following questions: How can these differences in the pattern of policy rates in the two currency areas be explained? Do they reflect differences in the monetary policy strategies adopted by the two central banks or deeper differences in the structure and dynamism of the two economies?

The observation that the policy rate has been much less volatile in the euro area than in the US can certainly not provide reliable information on the strategy of the two central banks, nor can it prove that the monetary policy of the ECB has been too gradual, or not sufficiently active. To answer these questions, it is crucial to assess policy moves against the prevailing state and structure of the respective economy.

Some early research undertaken by ECB watchers already addressed this topic.[1] Some more recent work undertaken by ECB staff has provided further insights that I believe are worth discussing today. The common theme of this work is that the causes of the different behaviour of policy rates in the euro area and the US over the last years can mainly be found in the following two factors. First, shocks of a different nature and pattern have hit the two economies, generating an unfavourable trade-off between inflation and output in the euro area, while the US economy was supported by rather strong productivity improvements. Second, the structure of the two economies is very different – mainly with respect to the degree of market flexibility – producing different effects in the two areas in response to similar shocks, with specific implications for monetary policy.

This interpretation does not deny the presence of some differences in the policy framework adopted in the two currency areas. For instance, the ECB's primary objective of price stability and its medium-term orientation imply scepticism regarding the appropriateness and efficacy of fine-tuning policies. In addition, the importance of monetary analysis in providing early warnings of price instability in the future, the strength of the central bank's reaction to inflation expectations and the response of the yield curve to policy changes would indeed normally translate into differences in the setting of the policy instrument. However, these factors seem to be of minor importance when dealing with the specific criticism that has been voiced against the ECB for being too passive over recent years.

These conclusions have been reached on the basis of a large body of evidence, arising from quite disparate means of analysis, thus suggesting that they are not a statistical artefact. I will now mainly review results based on two different approaches. The first are based on estimates of single-equation Taylor-type rules,[2] while the second are based on a structural approach, using a dynamic general equilibrium model of the economy.[3]

Observers often assess our policy based on estimates of single-equation Taylor-type rules. Of course, such rules are based on rather strong assumptions and simplifications and thus do not play a major role in policy decisions; no real policy-maker just looks at two or three variables. Moreover, the estimated coefficients are a combination of policy preferences and structural features of the economy and thus are difficult to interpret. Nevertheless, as this tool is widely used and assuming that it is able to broadly capture some statistical regularities of policy-making, let me make three remarks. First, such reaction function estimates are surrounded by considerable uncertainty and show very wide variations across different specifications. Second, the combined evidence from those specifications tracking best the past policy rate suggests that the ECB's response to output fluctuations is roughly similar to the one estimated for the Fed over Chairman Greenspan's full tenure, although smaller than the one estimated for the US monetary policy over the more recent period from 1999 onwards. Third, the degree of inertia of the policy rate is substantial in both the euro area and the US policy behaviour.

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1 See for example D. Begg et al. (2002), "Surviving the slowdown", Monitoring the European Central Bank, No. 4, CEPR.

2 Rolf Strauch (2006), "Empirical Estimates of Taylor-type Rules for the Euro Area – A Thick Modelling Approach" (mimeo).

3 The model is documented in L. Christiano, R. Motto and M. Rostagno (2003), "The Great Depression and the Friedman-Schwartz Hypothesis," Journal of Money, Credit and Banking 35(6), December. In a more recent paper, the authors use the model for a comparative estimation exercise, identifying structural shocks and monetary policy rules for the euro area and the US. See L. Christiano, R. Motto and M. Rostagno (2005), "Financial Factors in Business Cycles", presented at the IMF-IRF Conference on DSGE Modelling at Policymaking Institutions: Progress and Prospects hosted by the Federal Reserve Board of Governors in Washington on 2-3 December.

However, these estimates neither take into account the feedback of monetary policy into the economy, nor do they disentangle policy-making from the nature of shocks and the structure of the economy.

The analysis based on a structural model of the economy can potentially provide insights into these issues. It provides evidence that differences in the observed pattern of the policy rate in the euro area and the US over the last few years may be largely ascribed to a different mix of shocks rather than to sizeable differences in the conduct of monetary policy in the two currency areas. The "story" that seems to emerge from this analysis can be summarised in three sentences. The economic shocks responsible for the downturn in 2000-2001 were largely of the same nature across the two currency areas, and mainly associated with the financial turmoil which erupted in those years and with its negative implications for investment. However, the impact of those shocks – operating on the demand side and thus typically exerting a downward pressure on both output and inflation – was partially compensated for by positive productivity forces in the US. In the euro area, by contrast, negative productivity developments reinforced – rather than countered – the downturn, while at the same time keeping inflation from falling. The macroeconomic implications of this different mix of shocks are evident from a number of simple indicators. Inflation, wage cost growth and various measures of capacity utilisation fell quickly in response to the negative demand shocks hitting the US economy in 2000 and 2001. In particular, while investment demand weakened in the aftermath of the collapse of the stock markets, inflation and unit labour costs eased immediately due to product and labour market flexibility and, partly related to this, substantial productivity advancements. In this environment a substantial and prompt monetary easing was possible and necessary.

In contrast, real activity in the euro area slowed down later and less dramatically than in the US. At the same time, since 2001 productivity growth (and other supply shocks) surprised on the downside. As a consequence, inflation in the euro area moved up in early 2001 and then, in spite of the slowdown, did not fall much, but fluctuated at rates around or slightly above 2%.

Monetary policy-makers in the euro area thus had to face a very different and more difficult macroeconomic environment, suggesting that the ECB should lower rates more cautiously than the Fed. It is crucial to understand this link between structural features and the dynamism of the economy, on the one hand, and the optimal monetary policy response to a downturn, on the other hand. Here in the euro area we did not benefit from an economic structure and dynamism favourable to strong productivity enhancements, and we face labour and product market rigidities that stand in the way of a quick downward adjustment of price and wage cost inflation in response to an economic slowdown. This is most evident from the fact that during the three-year period from mid-2001 to mid-2004 unit labour costs in the euro area increased on average by around 2% per annum, while they slightly decreased in the US over the same period (after having increased substantially in 2000).

I regard this as an important message, not least for those who argue that we should have lowered rates more aggressively, and almost at the same time, defend an extensive interpretation of the so-called European social model with all its implied rigidities and inflexibilities that make such a response so difficult, if not impossible.

Given the dynamics of shocks and the structure of the euro area economy, the policy easing that the ECB started in 2001 and the low policy rates that prevailed over recent years represented a rather accommodative policy stance over an extended period of time. Policy rates over most of the last years were closer to the lower end of the range prescribed by the majority of policy benchmarks which one can estimate on the basis of the past policy conduct of the ECB and our legacy central banks. (This is particularly true if one takes into account the build-up of excess liquidity over recent years.) With the benefit of hindsight, we can now say that our stance was key in preventing a recession and ultimately facilitated the recovery.

Let me sum up. It is of course too early to draw firm conclusions on the conduct of monetary policy over the more than seven years since the ECB was set up. Nevertheless, the following points can be made.

First, the lower volatility of the policy rate in the euro area than in the US seems to mainly emerge from differences in the underlying economic structure and developments rather than fundamentally dissimilar monetary policy objectives and strategies. As you know, we would very much welcome structural reforms which enhance competition and flexibility in goods and labour markets. Such reforms would not only support productivity and employment, they would normally also make it possible for the ECB to react more strongly to economic downturns, without endangering price stability.

Second, as far as we can judge at this stage, the stance of policy was carefully calibrated to the economic situation and the given structure of the euro area. There is no convincing evidence available suggesting that the ECB might have been inappropriately passive or inactive.

Third, the critique that the ECB's monetary policy in recent years has provided insufficient support to the economy cannot be confirmed. The euro area policy rate in recent years, if anything, may have been relatively low compared with some of the benchmarks that can be constructed on the basis of past data, and by this standard the ECB could be judged as having been accommodative rather than having done "too little, too late".

Concluding remarks

In concluding, let me first recall my own remarks from the very first of these Watchers Conferences held back in June 1999. On that occasion, I said: "We are all journeying, in uncharted waters, towards a destination that is far from certain." Almost seven years on, that journey is coming to an end for me – at least in my capacity as a member of the ECB's Executive Board. Since 1999, we have made considerable progress in mapping those uncharted waters, although much further exploration remains to be done. Confounding the many sceptics at the outset of Monetary Union, the ECB has firmly established its credibility and reputation. Longer-term inflation expectations have been firmly anchored and a robust and durable monetary policy framework has been created. The journey is not yet complete, but a successful start has been made.

This Watchers Conference is a unique event. The Center for Financial Studies in the persons of first Axel Weber and now Volker Wieland has not only been a perfect organiser, but has given permanent intellectual input. In the end, it was our decision to meet our watchers, our critics from all camps: academia, banks, markets and media. For me it has always been a great challenge. I have learnt a lot from these conferences – I would not have liked to miss this experience.

I do hope that this event will continue to provide a platform for frank and open discussions of monetary policy issues and beyond.