

## **Christian Noyer: The Eurosystem's monetary policy – a view from the inside**

Speech by Mr Christian Noyer, Governor of the Bank of France, at the Swedbank's Annual Global Business Outlook Conference, Stockholm, 8 October 2007.

\* \* \*

Ladies and gentlemen,

It is an honour and a real pleasure to be back at a Swedbank's conference. In 1999, as Vice-President of the European Central Bank, I already had the opportunity to comment the then very recent introduction of the Euro. Eight years later, at a time when the Eurosystem, i.e. the ECB and the currently 13 national central banks, has just showed its ability to manage the financial turmoil triggered in Europe by the US subprime crisis, it is the right time to come back to the strategic framework of the Eurosystem, focusing on its main features and achievements.

The single currency for a long time met with the scepticism from many observers, who regarded it as unrealistic first to launch a new currency and second to envisage a single monetary policy for a group of countries that, despite rapid convergence, continued to display major differences. Interestingly enough, the assumption made by some observers and market participants that the entry interest rates in the Euro on 1 January 1999 would be some kind of average of the interest rates of the composing currencies proved to be wrong. On the contrary, and since the very construction of the Euro was based on continuity with the most credible national currencies, it was foreseeable that interest rate convergence inside the future Euro area would take place progressively on the basis of a merge of different yield curves of the various currencies with the benchmark yield curve corresponding to the most performing and credible ones, as it effectively happened.

The nay votes from France and the Netherlands to ratifying the EU constitution rattled Europeans concerns for the future. Some observers immediately conjectured that the single currency was directly responsible for the muted economic performance of the euro area and publicly questioned its durability; however, the track record of the Single monetary policy, after 8 years of implementation, has been really impressive: the inception of the euro has been so far associated with an increased macroeconomic and price stability within the euro zone, despite an unusual sequence of unfavourable events, adverse supply shocks and periods of global financial turbulences. The extent to which the recent episode of financial distress will affect the global outlook remains an open issue but the Eurosystem has demonstrated its ability to withstand such a shock as well as the effectiveness of its operational framework.

The point I would like to set out today is that a high degree of credibility, transparency and predictability of the Eurosystem's monetary policy is a key condition for its efficiency. I will provide you with an overview of the Eurosystem monetary policy strategy (part 1) and then will assess its main achievements (part 2).

### **PART 1: The main features of the Eurosystem monetary policy**

Let us see what the main features of the single monetary policy, conducted by the Eurosystem, are in terms of institutional and operational framework as well as on strategic issues themselves.

## ***The institutional and operational framework is founded on modern concepts***

Let me recall first that over the past decade, a large body of literature has been devoted to questions surrounding central bank independence, the concepts of transparency and monetary strategies, and the communication of monetary policy decisions.

Drawing on this analytical expertise and the experience of the national central banks of the participating countries, the Eurosystem is first and foremost based on a modern institutional framework, founded on the principles of **independence**, **transparency** and **accountability** and, lastly, **operational decentralisation**.

### **1. *The independence of the Eurosystem fosters price stability***

The Eurosystem's primary objective, as enshrined in the Maastricht Treaty, is to achieve and maintain price stability. As many empirical studies have shown, a country's ability to fight inflation appears very closely correlated to the degree of **independence** of its central bank. The independence of the European Central Bank and the 13 national central banks of the Member States of the euro area is therefore anchored in the Treaty.

In operational terms, this means that, in the conduct of their duties, neither the European Central Bank nor the national central banks of the Eurosystem may request or take instructions from the Community institutions, national governments or any other body. They are entirely institutionally, operationally and financially independent.

*Transparency and accountability are also essential for gaining credibility*

Naturally, the independence of these institutions requires **transparency** in their decision-making processes and **accountability** vis-à-vis the general public and their representatives.

As regards new institutions such as the ECB, transparency is even more important for gaining credibility and building up economic agents' confidence in the new currency. In order to establish this credibility and gain the confidence of agents, it is imperative to be understood, which in turn calls for transparency. For the sake of **transparency**, the Governing Council has specified and quantified its definition of price stability (inflation below but close to 2% over the medium-term).

Second, the ECB has gone beyond the **accountability** requirements laid down by the Treaty by instituting regular testimonies by the President of the ECB before the European Parliament and regular informal meetings with the Eurogroup of Finance ministers. Another channel for transparency is constituted by the regular publication of reports on economic developments and Central Bank analysis, of the Eurosystem's and ECB's staff projections exercises, most prominently in the ECB's *Monthly Bulletin*.

Finally and most importantly, following monetary policy decisions, the President and Vice-President of the ECB hold a press conference followed by an open discussion with journalists, the transcript of which is published on the ECB's website. It should be recalled that the ECB was the first central bank to adopt such a procedure, which provides a unique opportunity to fully explain and comment monetary decisions immediately.

On the other hand, the Governing Council of the ECB has chosen not to publish the minutes of its meetings. The publication of these minutes would indeed present some drawbacks:

- first, governing council members may "speak for the minutes" when these are very detailed, while, when they are not detailed, may not convey more information than a plain communiqué;
- second, the publication of the minutes might also create more difficulties for moving from initial positions to new ones in the light of the arguments developed;
- finally and most importantly, in the case of the euro area, the analysis of the votes could be read and interpreted as reflecting national interests or preoccupations,

which would be misleading and could jeopardise both the independence of the members of the Governing Council and the credibility of our decision-making processes.

#### *The Eurosystem is based on operational decentralisation*

The third imperative, **operational decentralisation** is an essential feature of the Eurosystem. According to this principle, monetary policy decisions taken in a centralised fashion by the Governing Council of the ECB are implemented in a decentralised way by the national central banks.

Contrary to the US, the use of modern technology and communications has made it possible for market operations not to be concentrated at a single geographical location, but to be carried out simultaneously at all of the National Central Banks. The same type of arrangement applies in other monetary areas (cash management, payment systems, etc.).

The efficiency of such a decentralised scheme has been demonstrated in August and September when the inter-bank money market has gone through marked turbulences. The close relationship of national central banks with their banking system has allowed better understanding and addressing their refinancing needs.

#### *The Eurosystem benefits from an efficient operational framework*

The operational framework is based on two main guidelines:

- a range of monetary policy instruments selected in accordance with the principles of an open market economy, a level playing field, simplicity and transparency: these instruments enable the smooth adjustment of banking liquidity and effective steering of short-term interest rates. I should add that the Eurosystem accepts a wide range of collateral, including private securities, to carry out its open market operations. It also provides credit for long maturities (with a 3-month maturity);
- procedures guaranteeing a high level of security for all interbank transactions and large-value payments within the euro area and with other countries in the European Union, with in particular the TARGET system, which played a predominant role in the integration process of the euro money market.

## **2. *The strategic framework also contributes to the efficiency of the single monetary policy***

From the outset, there was a consensus among the designers of the Eurosystem that the Single monetary policy would require a clear strategic framework. This framework can be characterised by two main principles: a quantitative definition of price stability and a medium-term orientation of monetary policy.

#### *The quantitative definition of price stability has been clarified after five years of experience*

The definition adopted by the ECB's Governing Council in October 1998 was confirmed and clarified in May 2003 following an in-depth review of its strategic framework by the Eurosystem. In the wake of this assessment exercise, the Governing Council specified that price stability was defined as an annual increase in the HICP close to, but below, 2% over the medium term. Several remarks should complement this definition:

- by specifying that inflation should be close to 2%, the Governing Council intended first of all to confirm the symmetrical nature of its strategy by ruling out situations of deflation. This clarification also makes it possible to take account of any possible measurement bias in the price index, as well as inflation differentials within the euro area;

- the quantitative definition of monetary stability brings the Eurosystem's strategic framework close to that of central banks that rely on inflation targeting, especially if a broad definition of the latter is accepted, such as that expressed by the term "flexible inflation targeting". The big difference is in the use made of forecasts derived from econometric models, which play a predominant role in "pure" inflation targeting strategies, whereas they are only one component in the decision-making process of the Governing Council of the Eurosystem;
- especially in the early days, we were confronted with substantial criticism regarding our definition of price stability, considered by many observers as too ambitious. Two points are worth mentioning at this stage:
  - First, due to the scepticism I already mentioned and for credibility reasons, it would have been damaging for the euro not to build on the credibility of the most efficient and successful participating national central banks, that had previously chosen 2% as the ceiling for their definition of price stability;
  - second, this criticism has abated recently and it is interesting to note that the definition of price stability has converged towards a level close to, if not below, 2%: in December 2003, Gordon Brown, then Chancellor of the Exchequer, announced a new inflation target for the Bank of England, based on the HICP, and set at a level of 2% for the 12-month increase; in the US, Ben Bernanke, while he was a member of the FOMC, advocated for a quantitative definition of the FED's price objective comprised between 1 and 2% over the medium-term.

*The Eurosystem's monetary policy is "medium-term" oriented*

What exactly are the implications of the medium-term orientation of the Eurosystem's monetary policy strategy?

The first is that the single monetary policy does not have a fixed horizon, defined once and for all *ex ante*, but aims, as far as possible, to take account of the "long and variable lags of monetary policy" dear to Milton Friedman. Taking account of this uncertainty is particularly important in the case of the euro area, whose "deep structural parameters" are somewhat uncertain to the extent that the inception of the euro may have been associated with a "regime shift". More prosaically, this medium-term orientation of the single monetary policy recognises that it is impossible for a central bank to control price developments with accuracy over the short-term.

The second implication is that the relevant indicators for monetary policy must reflect, almost exhaustively, the main sources of both short and long-term inflation. In the light of this, the monetary policy strategy seeks, as far as possible, to rely on a "full information approach".

This is what the concepts **economic analysis** and **monetary analysis** – also known as the two-pillar approach – used notably at the press conferences given by the ECB President following monetary policy decisions, reflect:

- the economic analysis examines cyclical, economic and financial indicators related to the main determinants of short-term inflation;
- the monetary analysis, is based on a monetary explanation of the low frequency movement of inflation.
- The medium-term orientation of the single monetary policy makes necessary the crosschecking of these two complementary approaches. From this point of view, the ECB's monetary policy strategy is more comprehensive than pure inflation or monetary targeting strategies.

External observers sometimes criticise the complexity of the Eurosystem's monetary policy strategy and argue in particular that the monetary pillar or analysis does not provide any

useful information for our monetary policy decision. It is considered by some as superfluous, confusing if not as an obstacle to transparency.

To give money an important role in its monetary policy analysis and strategy is however quite a natural thing for a central bank geared towards price stability to do, as inflation is “ultimately always and everywhere a monetary phenomenon”, to quote again Milton Friedman. It is worth mentioning that, in our set-up, with a clear medium-term focus, the Eurosystem does not need or have to react mechanically to short-term deviations of monetary growth from the reference value. Instead, monetary developments, i.e. both the developments of the components of M3 and of its counterparts, are analysed very carefully in order to examine and extract their information content for future inflation.

## **Part 2: The achievements of the Eurosystem’s monetary policy**

What preliminary assessment can we make of the first eight years of the single monetary policy? I would like to underline the following points, considering successively price stability, macroeconomic stability and convergence, monetary stance and predictability.

### **1. The achievement of the overriding policy objective: price stability**

Confronted with a series of adverse exogenous supply shocks (affecting in particular oil prices, food products and services prices), the Eurosystem has been able to contain inflationary pressures despite considerable volatility: since the Eurosystem became responsible for monetary policy in the euro area, HICP inflation has averaged 2.0 % (1.7% excluding unprocessed food and energy), which is near our definition of price stability at which we aim over the medium term. This figure mainly reflects the sharp increase in oil prices over the last two years. However, HICP inflation has remained below 2% since September 2006. In addition, let me remind you that HICP inflation was around 4% in the 1980s and about 9% in the 1970s [see Figure Annex p3].

Until recently, the single monetary policy also succeeded in stabilising and anchoring medium to long-term inflation expectations at around 1.8% to 1.9%, despite all the above mentioned shocks. That is to say, once again, at a level close to, but below, 2% in accordance with our definition of price stability – whether one takes the inflation expectations derived from surveys (for example, *Consensus Forecast*, or the ECB survey of professional forecasters – [see Figure Annex p4] ) or those drawn from market data, notably index-linked government bonds. Recently, the awareness of a higher cost of oil has pushed expectations slightly above 2%. This is asking for strong vigilance so as to ensure that medium to longer-term expectations in the euro area remain solidly anchored at level consistent with price stability.

### **2. Macroeconomic stability and convergence**

Price stability has not come at the expense of higher unemployment. Moreover, there are no visible signs of costs in terms of higher real macroeconomic volatility. Quite on the contrary, the volatility of real variables has declined relative to the averages observed during the 1980s and 1990s.

Does one size fit all? It is often argued that a single monetary policy combined with inflation differentials leads to different real interest rates across countries, which in turn may destabilise the currency union by creating divergence in output growth that exacerbate inflation differentials. This is by no way what we have observed:

First, inflation dispersion among the euro area countries (measured as the unweighted standard deviation of annual HICP inflation rates) amounted to 0.7 percentage point in 2006 compared to around 6 percentage points in the 1990s. Since the inception of the euro, the average inflation dispersion across the euro area countries has been around 1 percentage

point. This figure is very close to the dispersion observed across the 14 US metropolitan statistical areas.

Concerning growth differentials, euro area averages naturally mask a variety of growth performances of individual countries within the single currency area, especially in a context where structural convergence has not been completed yet. Growth dispersion is a natural phenomenon in any large economic area. Looking at the main trend, the degree of dispersion in real GDP growth rates across 12 euro area countries declined somewhat since 1999, reaching 1.5 percentage points in 2005, while for the largest countries it has remained close to 1 p.p. Let me recall that growth dispersion had been fluctuating around 2% since the 1970s. By comparison, the dispersion of real growth rates across the eight US statistical regions fluctuated around an average of 1.5 % between 1990 and 2002.

This is not surprising since some stabilisation channels are at work in a currency area: in particular, a credible monetary policy should bring about a convergence of expected inflation towards the definition of price stability, leading progressively to the convergence of *ex ante* real rates across the area; moreover, lower inflation relative to other trading partners increases price competitiveness, which in turn counteracts the initial effect of higher real interest rates.

### **3. Appropriateness of the monetary policy stance**

Has the monetary policy stance been appropriate? To try answering that delicate question, the literature of central bank watchers or observers has mainly focused on Taylor-type rules as a usual benchmark.

Despite numerous caveats, such an approach can be very informative as it addresses several relevant issues such as: is the monetary policy decision process rule-based or rather discretionary? To what extent is the central bank too focused on price stability at the expense of, say, growth and employment? Is the central bank forward-looking or rather “behind the curve”?

These are actually some of the recurrent criticisms I have heard about the Eurosystem’s monetary policy: too obscure, too narrow-focused, too late. One can build up (see Figure page 7 of the Annex) a forward-looking Taylor-type rule for the ECB’s minimum bid rate. As an overall assessment, the Taylor-type rule closely matches Eurosystem’s monetary policy decisions.

Under the proviso that this rule provides a good benchmark, it is quite unclear why the Eurosystem has attracted so much criticism: in particular, the output stabilisation “objective”, as encapsulated in a standard Taylor rule, has not been overlooked by the overriding objective of price stability. In that regard, one should be aware that, in the euro area as elsewhere, price stability aims at providing the highest sustainable growth and employment in the longer run; finally, the decisions have been taken in a timely fashion, the Eurosystem conducting its monetary policy in a forward-looking and pre-emptive way.

However, the same figure shows that policy decisions deviate from the Taylor rule benchmark. Actually, being rule-based doesn’t imply being rule-bound and monetary policy decisions are not taken on the basis of mechanical rules.

I already mentioned the Eurosystem adopted a full-information approach, which besides the usual array of economic and financial indicators also gives a key role to monetary analysis not factored in usual Taylor rules. Identifying in real time the nature of monetary developments and their implication for future price developments represents however increasing challenges.

Meeting these challenges has not been straightforward in recent years as the euro area economy was hit by several shocks: financial instability in the aftermath of the stock market

collapse in 2000, exceptionally high economic and geopolitical uncertainty between 2001 and 2003, just to name a few.

- First of all, we have to identify and account for temporary “special factors” or “distortions” that may affect monetary developments and blur their information content. To some extent it is the aim of the methodology developed at the ECB which allows for periodic adjustments to measured monetary aggregates in order to account for portfolio shifts which impact the demand for money without any incidence on future inflation. This approach has met with great success in the period 2000-2004, allowing the Eurosystem to enter an easing cycle despite a rapid growth of M3.
- Second, and more permanently, it is necessary to disentangle, in monetary and credit evolutions, those which reflect structural and permanent changes from those which simply result from moves in the level of interest rates and the position in the economic cycle.
- Finally, we must be able to assess whether these developments result from money supply shocks, in which case they clearly entail some risks to price stability, or whether they are caused by money demand shocks that may raise the desired level of money balances without necessarily impacting aggregate demand. Such demand shocks can be triggered by structural changes in the behaviour of economic agents or result from portfolio shifts or financial innovations in the context of financial globalisation. There are indeed some signs that a money demand shock occurred at the beginning of the 2000s in the euro area, as illustrated by an apparent structural shift in the trend velocity of money, which summarises the relationship between money, output and the price level. (see Figure Annex page 8). A tentative explanation is that our economies are becoming more and more “financial” in the sense that the ratio of financial wealth to GDP is constantly increasing. Since economic agents – especially financial intermediaries and corporates – need to keep part of their total financial assets in liquid holdings, there may be a structural increase in the demand for money (everything equal). The euro and the integration of European capital markets may have accelerated this evolution.

As an illustration of the uncertainties facing euro area monetary policy makers, one possible consequence of current events in credit markets may be to trigger a re-intermediation process, i.e. an expansion of banks' balance sheets which may further complicate our reading and interpretation of monetary and credit dynamics in the months to come.

As you can see there is a need to continuously reassess and diversify the tools used in our monetary analysis.

#### **4. *Predictability and frequency of policy actions***

Contrary to some preconceptions, most monetary policy decisions have been perfectly anticipated by the markets. This assessment derives from studies conducted by the Eurosystem but also from the reports published by “ECB Watchers”, with whom, incidentally, the ECB has regular contact, notably in the context of annual conferences.

Research carried out by these “ECB Watchers” show for example that on average, the Eurosystem’s monetary policy decisions were very well anticipated by financial markets, whatever their orientation, at least two weeks in advance, and fully factored in at least a week before.

A comparison with the Fed, moreover, does not reveal significant differences between the two institutions with regard to the ability of markets to anticipate the monetary policy decisions of the two institutions. That points to **the transparency of the single monetary policy**. In particular, the fact that the ECB has chosen channels other than the publication of

minutes of the meetings of the Governing Council has not prevented it from reaching a high level of predictability.

As regards the frequency, since the inception of the euro in 1999, the Eurosystem has changed its policy rates 25 times (8 cuts, 17 hikes), which is on average close to the usual average frequency of interest rate changes<sup>1</sup>.

However, compared to the Federal Reserve, in particular since 2001, the frequency of the changes is by far lower. Does this necessarily imply that the Eurosystem does not move enough or too low? I think there is a broad agreement on the fact that interest rate decisions are state-dependent rather than time-dependent and as a consequence, both the frequency and the amplitude of the policy changes are mainly driven by the underlying state of the economy.

As far as the Eurosystem is concerned, the more gradualist approach is nothing but the reflection that the economy of the euro area has been less affected by cyclical fluctuations than the US economy. Moreover, recent research carried out by the Eurosystem on inflation persistence tends to show that the degree of inflation persistence in the euro area is quite moderate while the degree of price stickiness is considerable and higher than in the United States. This finding may provide another justification for a gradualist monetary response to cost-push shocks as: first, the impact of an inflation shock will be small as agents anticipate a low persistence of this shock and therefore will maintain their expectations of future inflation at low levels; in turn, the negative response of the output gap will be limited implying a less persistent response of the real rate.

#### **5. *As a result, the Eurosystem monetary policy has won European citizens' confidence in and acceptance of the new currency***

Finally, the euro has been readily accepted by economic agents and is now part of European consumers' daily lives. Surveys confirm that the general public has confidence in the euro, as a solid currency, and in the Eurosystem as their Central Bank.

However, there remain two causes for concern:

- one is the natural difficulty in moving to an entirely new set of price references – and it may take a number of years before this switch is fully made by the public at large.
- and the second, probably related to the first one, is the feeling in the public that there have been excessive price increases linked to the cash changeover. Indeed, the public's attention has focused on a small number of goods and services in which abnormal increases occurred at the time of this event, leading to a misperception of the real rate of inflation. This gap between perceived inflation and real inflation has however been narrowing progressively and should hopefully disappear in the near future.

#### **Concluding remarks**

To conclude, let me emphasise that eight years after its adoption, the euro has lived up to all of our expectations. After the unprecedented challenge of a continent-wide cash changeover, the euro almost instantly replaced the legacy currencies without any disruptions.

It has fostered both price and macroeconomic stability through its credibility and has shielded many euro area countries from significant exchange rate volatility and financial market

---

<sup>1</sup> On average, central banks of industrialised countries changed their policy rates every 5 months both in the 1980s and the 1990s (Source Clerc et Yates (1999): "Interest rate stepping: some puzzles and facts", mimeo Bank of England), which is close to the frequency of the ECB interest rate changes (4.7 months).

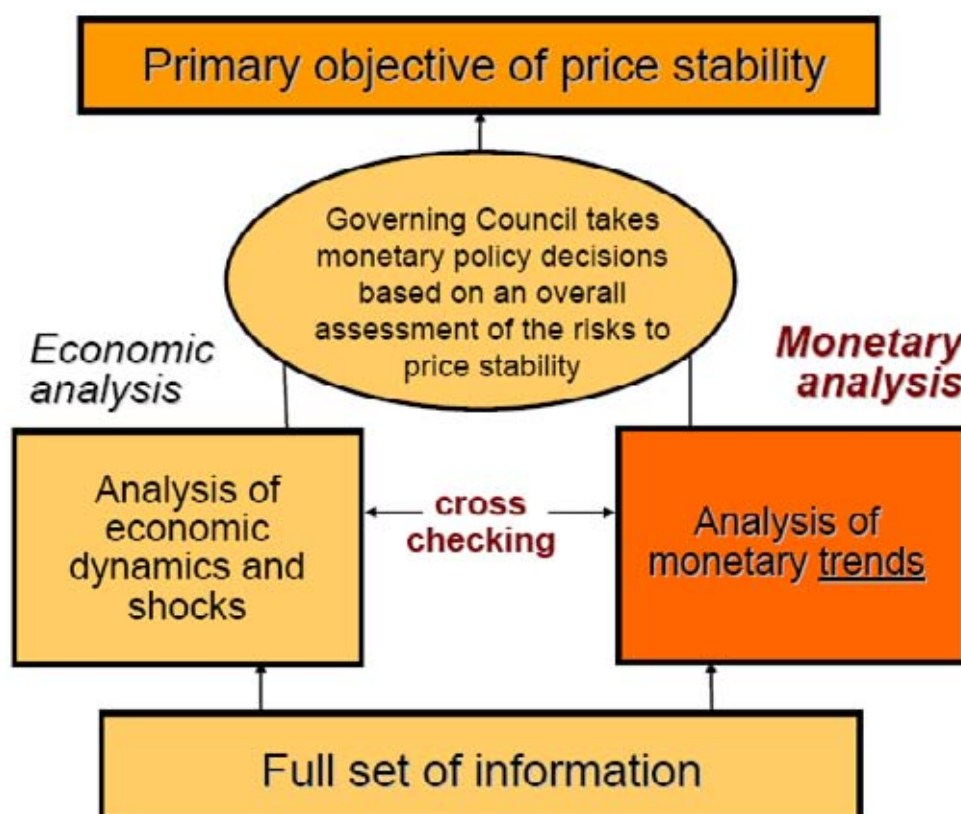


turmoil. It is all the more important to acknowledge these achievements since it was said in some quarters that the euro would never see the light of day or that it would create severe economic disruptions. Those scenarios have not materialised.

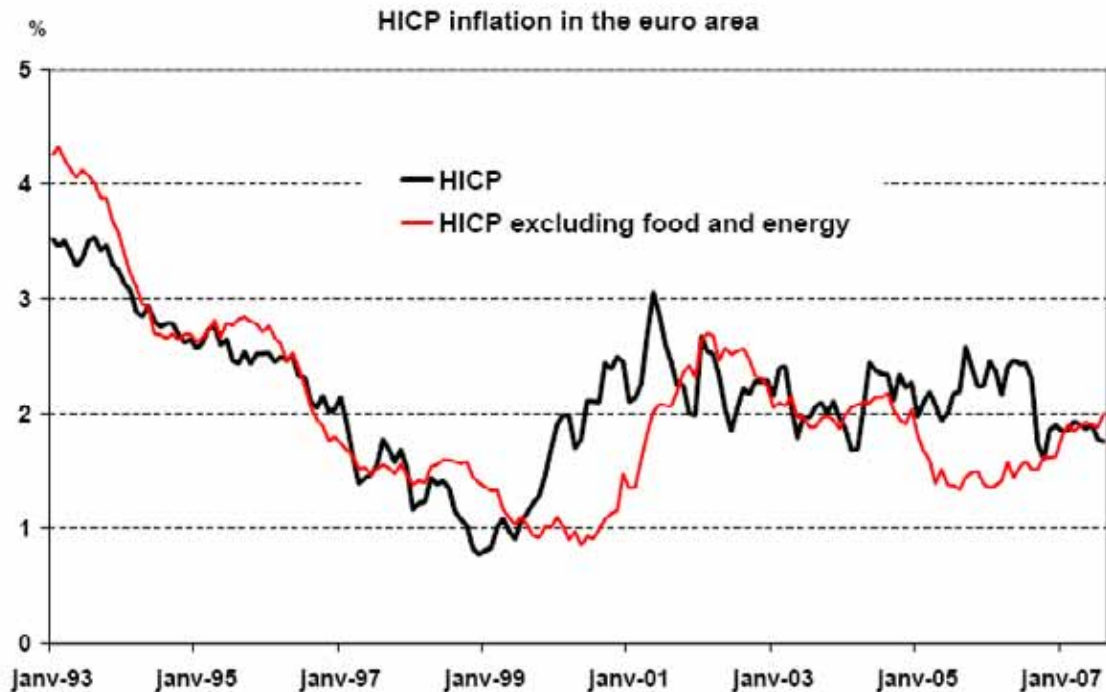
In the post-war European adventure, the euro represents a major milestone. That said, and whatever its own merits, a currency is not an end in itself, even though the new EU members are keen on adopting it as soon as possible. Entry into Monetary Union must be founded on a sustainable convergence process. Enlargement of the euro area also gives renewed impetus to addressing the challenges ahead as it makes it more pressing for policy-makers to tackle long-ignored weaknesses. This is a crucial contribution to building a stronger EU, in which I strongly believe.

All in all, let me express my confidence in the future of the euro and of the single monetary policy of a large Euro zone.

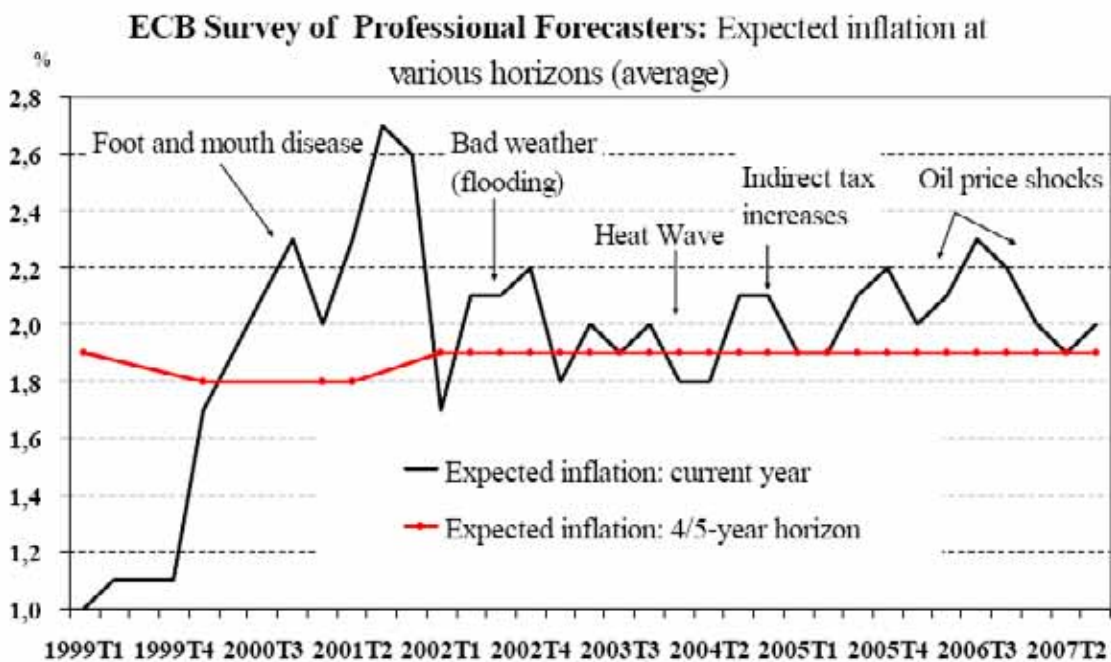
## The ECB's monetary policy strategy



# The achievement of price stability



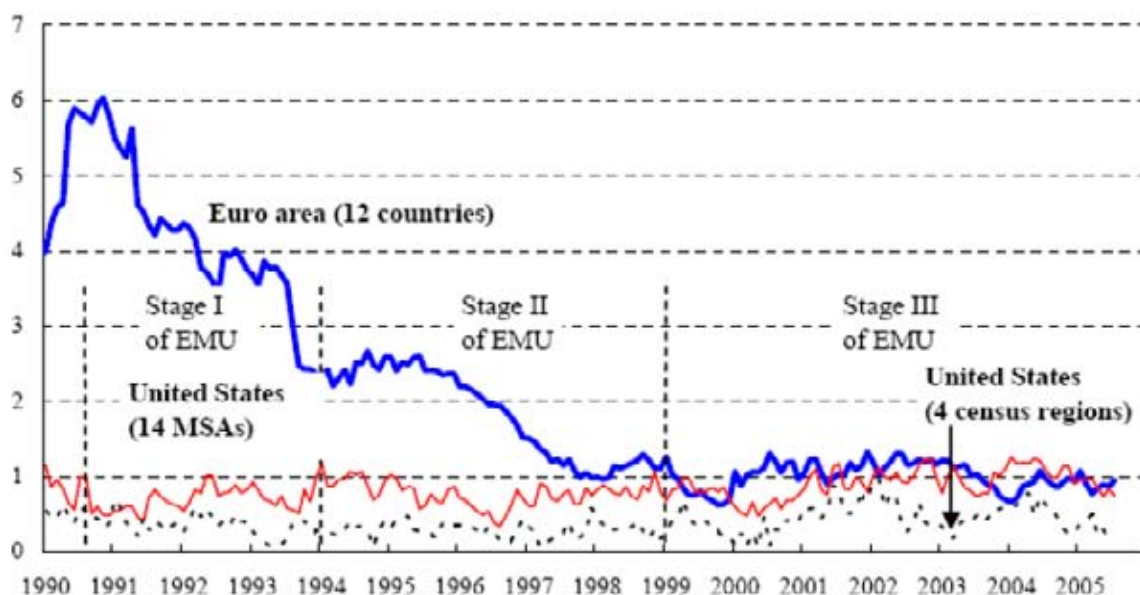
# The anchorage of long-term expectations



## Inflation dispersion across euro area countries and US MSAs

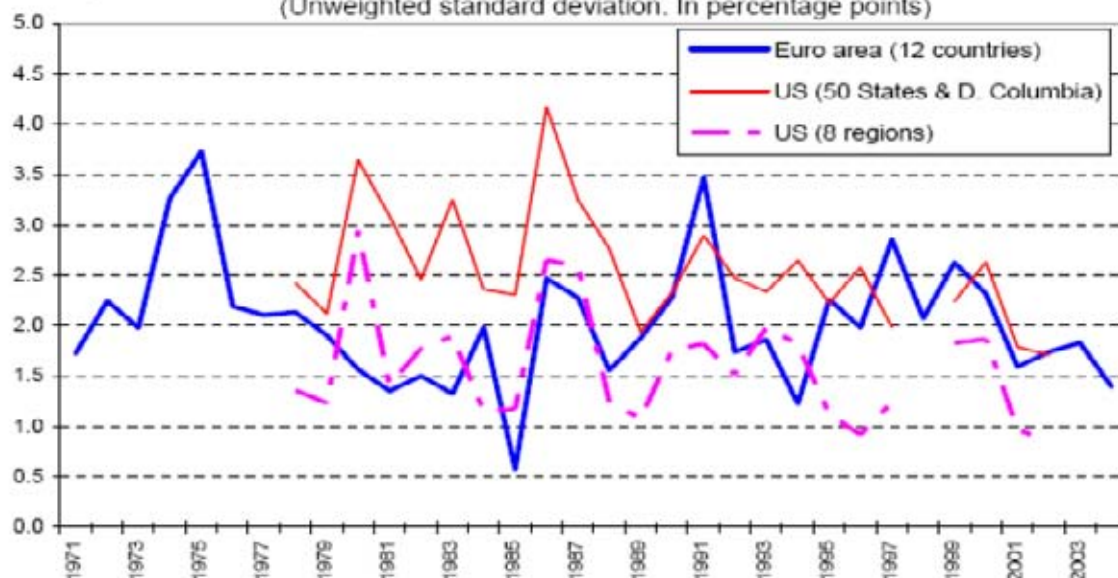
**The dispersion of annual inflation across euro area countries and the 14 US Metropolitan Statistical Areas (MSAs) and the 4 US census regions**

*(unweighted standard deviation in percentages)*



## Growth differentials across euro area countries and US regions/ States

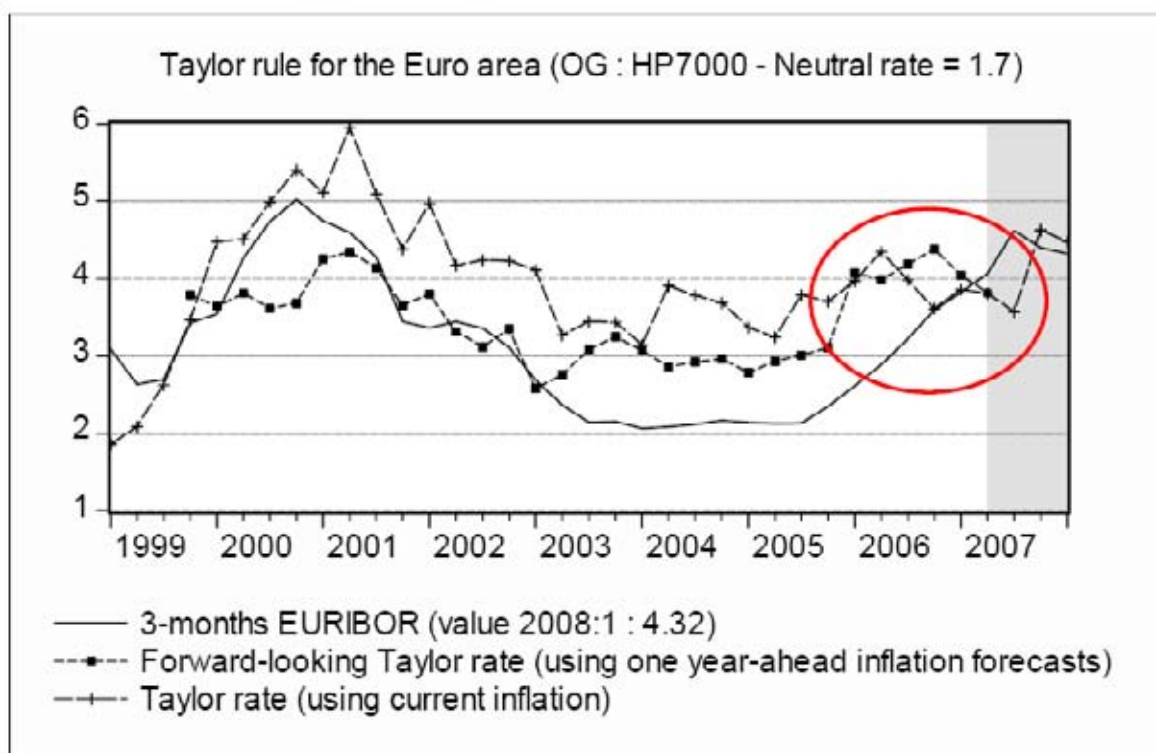
**Dispersion of real GDP growth rates (annual averages) within the euro area and US (\*)**  
(Unweighted standard deviation. In percentage points)



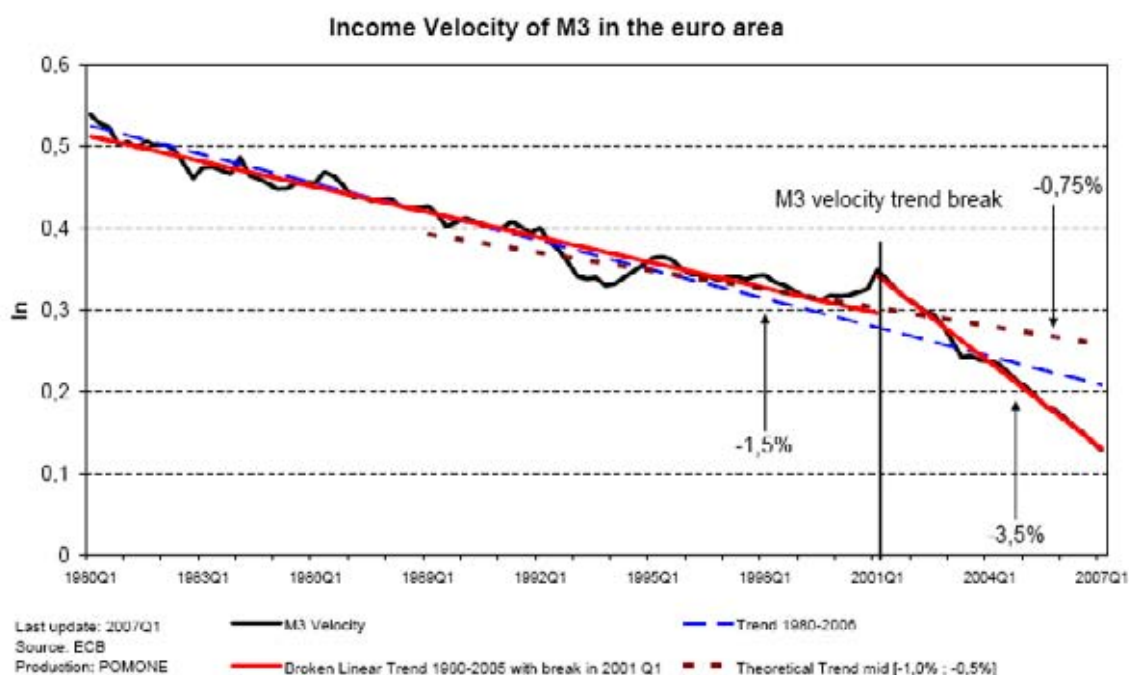
Sources: European Commission (Ameco database) and US Bureau of Economic Analysis (BEA).

(\*) There is a statistical break in the US regional data in 1998. In the US states and regions, the data refer to Gross State Product (GSP). The 8 regions are defined by BEA covering the whole country.

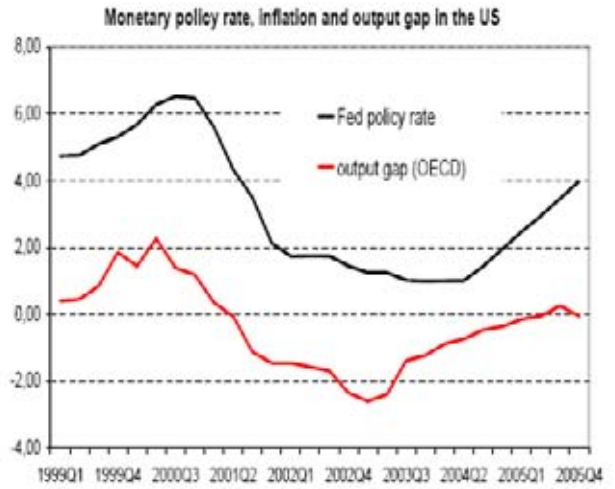
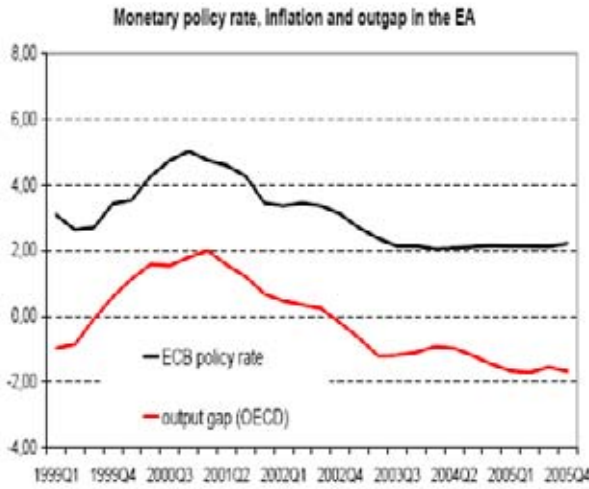
## Monetary Policy Stance in the euro area



## The challenging task of assessing monetary developments in real time



# Comparison ECB - FED



# Cash changeover and perceived inflation

