

**Policy Department
Economic and Scientific Policy**

Monetary Dialogue – 26th March 2008

Background documents and Briefing notes

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DG INTERNAL POLICIES OF THE UNION

- Directorate A -
ECONOMIC AND SCIENTIFIC POLICY
POLICY DEPARTMENT

MONETARY DIALOGUE MARCH 2008

SUMMARY OF MONETARY EXPERTS' PANEL BRIEFING PAPERS

for the Preparatory Meeting – 25 March, 11.00-13.00hrs, ASP 3E3

The following summary presents the respective topics of the briefing papers followed by brief points on the main answers of the experts to the questions asked. Only selected main points are mentioned here.

1. Separability of ECB objectives and tasks: Price stability vs. lender of last resort

In the last Monetary Dialogue in December 2007 President Trichet stated the following:

"...once the [ECB] Governing Council has defined the monetary policy stance necessary for maintaining price stability in the medium term, in line with its mandate as defined by the Treaty, the ECB has the responsibility to also ensure the smooth functioning of the segment of the money market that we influence. I should like to underline - once again - that these two responsibilities are clearly distinct and should not be mixed."

Price stability (in the medium term) is the primary and overriding objective of ECB monetary policy. However, the turbulences on financial markets since August 2007 have seen the ECB conducting liquidity provision in the money markets in a way which could be called a *de facto* lender-of-last-resort policy. President Trichet has repeatedly argued that the price stability objective can be kept strictly separate from the money market liquidity issues. He can thus be interpreted to have implied that current interest rate policies have nothing to do with these market crises. However, the sentiment in the markets and among the public has not been in agreement with this statement.

The experts were asked to comment on the above statement and to give their view on whether there is a credibility problem. Closely related, the question of how to react in the interbank market in a situation of weak liquidity without affecting central monetary policy conditions was discussed by experts. As a result, there seems to be wide consensus on the fact that the two objectives should, and can, in principle be separated. There is somewhat less consensus on how well the ECB has succeeded, and whether its reactions were better than the FED's.

Although the tasks can be dealt with separately to some degree, this does not mean that there are no interdependencies between the two tasks, especially in the short term. As to the consequences and possible remedies, there was much less agreement among experts. The variety of answers includes such issues as defining the 'medium term' more clearly, which should enhance the certainty in inflation expectations. Also, the effects on long term interest rates (spread) are a useful indicator of credibility and success of the policy. Furthermore, the output gap is an important indicator of short/mid-term inflation expectations and the looming danger of recession and deflation has to be taken into account.

Furthermore, the experts were asked to provide their views on how to deal with communication in a situation of bankruptcy of a major single euro area financial institution in a way that does not generate outright panic. As a mentioned possibility, an important element in preventing disorderly panic in the euro area could be better deposit insurance systems. Openness, promptness and decisiveness in communication are the best principles when faced with such a situation of panic. However, communication alone is unlikely to prevent panic as the central bank always has the incentive to play down the crisis, and therefore its 'words' will not be believed. Finally, the present framework of crisis supervision in the EU seems inadequate. This message is either explicit or implicit in most contributions.

In sum, the considerable variety of answers and arguments can be seen as evidence of high uncertainty, also among academics, on the proper reactions to the past (and possibly ongoing) turbulences.

Sylvester EIJJFINGER – The ECB should give a better definition of 'medium term'

After the crisis, the FED chose the wrong models for monetary policy, proven by the fact that inflation expectations have starkly risen in the US and real interest rates have turned negative. This bears a clear danger of stagflation in the US. Fortunately, the ECB has not made the same mistake but has retained its focus on price stability. In periods of high volatility and uncertainty, the central bank should be the "beacon of stability". A clear proof of this is that in the whole existence of the ECB, real interest rates have never been negative in the euro area.

The separation of monetary policy and money market policy is good to maintain this stance. Even though interest rate decisions should not be guided by money market requirements, the two functions are not entirely independent and careful analysis of the interdependencies is necessary. One should realize that many short-terms constitute a medium term. Despite the clear definition of price stability of the ECB, it would be even better if the ECB defined 'medium term' more precisely as this would enhance its transparency.

Jean-Paul FITOUSSI – The different strategies of the FED and the ECB in the aftermath of the crisis are visible most clearly in the interest rate spread

According to the prior that inflation is always a monetary phenomenon and that interest rate policies should be devoted exclusively to deal with inflation pressures, the ECB conducted only short-term liquidity injections in the interbank market leaving the interest rate unchanged. This strategy was very different to that of the FED which reduced rates. Both strategies were successful in bringing short term rates to normal levels. However, they proved very different on their effect on long term rates. The FED reduction also somewhat reduced mid- to long term rates (< 3 yrs maturity), while that of the ECB did not.

The ECB can be said to follow this more restrictive macro policy with a strategic objective in mind. Higher (long-term) rates play a dampening role on inflation. That way, markets carry out what the ECB need not do itself. However, this (hidden) strategy, were it to be true, would have serious consequences for the credibility and the transparency of the ECB. In a period of growing uncertainty about the "normal" or "natural" rate of interest, the best strategy would be that which directly combats the gravest dangers: depression and debt inflation.

Leon PODKAMINER – Under grave financial instabilities the low inflation objective should play a subordinate role

Since the crisis in August 2007 the policies of the Eurosystem have been better than 'their' words. The ECB has become somewhat indifferent to high and rising inflation, while major central banks within the Eurosystem supply their markets with large amounts of liquidity.

In the end, the ECB may even get away with this without substantially damaging its credibility, despite the gap between words and deeds. However, there is room for better communication.

There seems to be insufficient appreciation of the dangers of deflation in the context of financial instabilities coupled with restrictive monetary policies. Preventing financial collapse may necessitate higher inflation, but this is considerably better than deflation.

Openness, promptness and decisiveness are the best tools to counter failures of major banks in the euro area. Quick and comprehensive final decisions should be made and announced to prevent panic.

Anne SIBERT – Modern central banks should be "market makers" of last resort

At times when most external financing was provided by banks, a central bank was well suited for its role as a 'lender of last resort' to prevent bank runs and panic. Today, as external finance is increasingly acquired by issuing tradeable financial instruments, central banks should engage in those markets by trading securities, especially those that have stopped trading. Following from this, faced with the present crises the FED and the ECB should allow a wider range of collateral in their lending. The reaction to the current crisis, providing liquidity against high-quality collateral, ended up in a policy of providing additional liquidity to institutions that did not need it.

An important element in preventing disorderly panic in the euro area is a better deposit insurance system. Moreover, the decision whether a particular institution is too important to fail is too political to be left to unelected officials of a central bank. Furthermore, central bank communication alone is not going to prevent bank runs as the message will not be believed as the central bank has an incentive to claim that things are better than they are.

Pedro SCHWARTZ - ECB does well in separating the two functions but its monetary policy has possibly lately become too timid

The lender-of-last-resort function of the central bank, which aims to provide extraordinary credit in the very short run to temporarily illiquid banks; and the sound money function which aims at maintaining the purchasing power of the currency in the mid and long term, should be separated in principle and executed separately. The extraordinary intervention of the ECB in the money market of December 2007 did not increase the aggregate money supply, nor did it affect monetary policy targets.

Nevertheless, despite this clear policy framework, the refusal of the ECB to raise its official interest rates to counteract the present surge in inflation expectations can be seen as confusing. There is clear evidence of the fact that a forward-looking strategy that the ECB follows would have demanded the ECB to raise interest rates since the last quarter of 2007. This did not happen, and one can interpret this as an attempt by the ECB to 'err on the 'safe side', trying to prevent a recession at any cost. However, this policy might well be too timid.

Norbert WALTER - Recent ECB operations in the money markets do not conflict with the objective of price stability

Forecasts for euro zone growth have recently been corrected downward and a smaller output gap will also take pressure off inflation. Money markets have also remained 'open', evidenced by the fact that the ECB has not expanded its balance sheet in an unusual way except for a brief period in December 2007.

In principle, the provision of emergency liquidity could undermine private sector discipline, which is needed for financial stability. However, as long as these actions remain exceptional in nature and misbehaviour is sanctioned, the effects on moral hazard should be negligible. Independently of these considerations, the EU arrangements for effective crisis management are clearly insufficient and much more needs to be done.

2. Inflation targeting – an alternative monetary policy strategy for the ECB?

ECB monetary policy is frequently criticised as being opaque. To achieve its primary goal of price stability, the Bank relies on a two pillar strategy with the first pillar essentially providing an inflation forecast based on a range of financial and non-financial data while the second pillar reflects purely monetary developments. The Bank has so far failed to explain clearly how conflicts between the two pillars are to be reconciled. Also, monetary growth has been in excess of the ECB's own reference value for most of the time since the start of EMU. To add to the opaqueness, the ECB's current definition of price stability leaves unclear at what specific numerical rate of inflation the ECB is aiming in its policy making. Given the above, the experts were asked to consider inflation targeting and whether such a strategy could lead to more transparency and effectiveness in ECB monetary policy-making.

The basic idea of inflation targeting is that a quantitative inflation target is set which is revealed to the public. The target enables the public to form expectations and people will behave in accordance with these expectations. It is assumed that everybody incorporates the target when fixing wages and prices. In doing so price stability is ensured without the necessity of a central bank to cool the economy down or to stimulate it. Boom and bust cycles should be much less pronounced this way.

A transparent central bank following inflation targeting would also reveal information on the instrument used. In order to do so, it is necessary to publish forecasts on inflation without changing interest rates and as a second step the corresponding path for interest rates. With this information provided, the public is supposed to be able to form sound expectations anchored around the price stability target. The forecasts are the central bank's best guess of the likely path of inflation. They are based on current information and understood to eventually turn out to be imprecise, if not erroneous. Most inflation-targeting central banks now publish likely margins of error. The forecasts are not staff forecasts, but underwritten by those who make policy decisions. This is important as it ensures that policymakers take personal responsibility for the forecasts upon which they base their actions.

There is a distinction between strict and flexible inflation targeting. Strict targeting calls for a forceful move in the interest rate when inflation leaves the target range so that inflation moves back to the target as soon as possible. Flexible targeting exploits the length of the horizon to achieve the same inflation rate while taking into account other considerations, mainly growth and employment, but asset prices or exchange rates can also be factored in.

More than 20 central banks have adopted inflation targeting. The target is commonly either a range or a rate with a tolerance margin. In some cases the target is publicly set by a political authority (e.g. the Chancellor in the UK), in others it is the central bank's choice (e.g. in Sweden). The horizon is typically two to three years which corresponds to the current understanding of how long it takes for monetary policy to affect inflation.

The debate about inflation targeting continues. The recent record of inflation targeting countries has been good, but many other countries also have reduced inflation and maintained low rates even without employing a formal targeting framework. The generally benign macroeconomic environment of the past few years still leaves much unknown about how best to reconcile sufficient policy flexibility with maintaining low inflation.

Guillermo DE LA DEHESA – What really matters for a successful monetary policy is establishing a strong nominal anchor

The main difference between the ECB and inflation targeters is that forecasts do not constitute the main vehicle around which the policy process and communication is organised. Another major difference is the monetary pillar in the ECB strategy.

Following comments by the Spanish Central Bank Governor and by ECB Vice-President Lucas Papademos it seems as if it would only be a question of time to expect the ECB monetary policy strategy becoming much closer to that of a flexible inflation targeting.

Gustav HORN - There is no fundamental problem, nevertheless, marginal improvements are possible

The two pillar strategy is very complicated to communicate and the monetary pillar has not proven very reliable during the recent past. Therefore, the ECB should skip it, since it may disturb expectations. Instead, monetary aggregates should be routinely incorporated into the usual inflation forecast.

The ECB should rephrase its target in favour of a symmetrical interval around the target rate, reaching from 1 to 3 %. This simplifies the communication of why and how the ECB reacts only sluggishly to external price shock as is presently the case.

More fundamentally, the ECB should communicate that output also plays a role in its strategy. Hence the ECB should follow flexible inflation targeting which is not in conflict with its primary goal of price stability as long as the weights are set appropriately and output developments also enter the inflation forecast.

Jean-Pierre PATAT – Inflation targeting would not be opportune for the ECB

Inflation targeting means that inflation control is the alpha and the omega of central bank action. Despite severe criticisms, it is obvious that the ECB's price stability objective is the Bank's main concern, but in practice there is some pragmatism. If not, monetary policy would have been more restrictive since 2002.

The specific position of major currencies and central banks means that they don't need to offer an anchor to the rest of the world as their credibility is linked to other factors (financial market attractiveness, economic prospects, etc.) They are heavy liners which don't move brutally and widely in the short term, and their movements are cyclical.

It is also necessary to consider specific responsibilities of major central banks in financial stability. It would be counterproductive to adopt inflation targeting. This would mean that in controlling inflation, all financial disorders would be avoided, which is not the case.

Charles WYPLOSZ - The ECB would be well advised to remove the monetary pillar and fully adopt inflation targeting

The ECB is a closet inflation targeter. The result is that its deeds do not closely match its words. This discrepancy has an adverse effect on the predictability of future ECB decisions with non-trivial costs in terms of policy effectiveness.

The ECB should adopt a flexible inflation targeting strategy. Doing so would involve: announcing an inflation target (hopefully higher than the 'less but close to 2%'); identifying the horizon (the current 'medium run' is too vague); publishing the inflation and growth rate forecasts of its Board of Governors; relating its interest decisions to discrepancies between the forecasts and the target; and, ideally, publishing the interest rate forecasts of its Board.

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SEPARABILITY OF ECB OBJECTIVES AND TASKS:

PRICE STABILITY VS. LENDER OF LAST RESORT

Briefing Paper for the Monetary Dialogue of March 2008 by the Committee on Economic and Monetary Affairs of the European Parliament with the President of the European Central Bank

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Executive Summary

The purpose of this Briefing Paper is to discuss the separability of ECB objectives and tasks, in particular the distinction between the objective of price stability and the task of lender of last resort. At this moment inflation expectations are increasing and real interest rates are decreasing, particularly in the United States. This demonstrates that the Fed is choosing the wrong model for its monetary policy: interest rates are decreased to accommodate the demands of the financial markets, since they need lower interest rates to solve their liquidity problems. However, Wall Street will keep demanding more and more, since this is no sustainable way to go. Therefore, with real interest rates turning negative, the Fed has taken a huge gamble. It is a one-way policy: if it helps the financial markets to recover and the economy to expand, it has succeeded. However, if the real interest rate turns negative for a longer period of time, the savings rate (which is already very low) will decrease even more and a recession will be inevitable. Nevertheless, the Fed's strategy could put the US economy into stagflation.

The ECB, however, focuses exclusively on price stability. The focus on price stability exhibits a long-term view by the ECB. In these times of high inflation and especially high inflation expectations, the central bank should be a beacon of stability. The ECB should be leading the financial markets, independently. When separating the tasks, the ECB can concentrate on maintaining price stability. This is also one of the reasons that real interest rates in the Eurozone have never turned negative in the (almost) decade that the ECB has been in charge of monetary policy. This tells us that the ECB does well in focusing on price stability, and the separation of monetary policy and money market policy is good to maintain this stance. However, one should realise that many short terms in the money market constitute a medium term, which may interfere with the monetary policy of the ECB. Nevertheless, it should be mentioned that the ECB has never defined exactly, also not in the Monetary Dialogue with the Committee on Economic and Monetary Affairs (ECON), what it considers to be the 'medium term'. Although the ECB has defined price stability clearly, it would be even better if it went further and define the 'medium term' more precisely. This would enhance the transparency of the ECB and would make the accountability of the ECB towards the ECON Committee much easier.

Introduction¹

The purpose of this Briefing Paper is to discuss the separability of European Central Bank (ECB) objectives and tasks, in particular the distinction between the objective of price stability and the task of lender of last resort. In the last Monetary Dialogue in December 2007 President Trichet stated the following:

"...once the [ECB] Governing Council has defined the monetary policy stance necessary for maintaining price stability in the medium term, in line with its mandate as defined by the Treaty, the ECB has the responsibility to also ensure the smooth functioning of the segment of the money market that we influence. I should like to underline - once again - that these two responsibilities are clearly distinct and should not be mixed."

Price stability (in the medium term) is the primary and overriding objective of ECB monetary policy. However, the turbulences on financial markets since August 2007 have seen the ECB conducting liquidity provision in the money markets in a way, which could be called a de facto lender-of-last-resort policy. President Trichet has repeatedly argued that the price stability objective can be kept strictly separate from the money market liquidity issues. He can thus be interpreted to have implied that current interest rate policies have nothing to do with these market crises. However, the sentiment in the markets and among the public has not been in agreement with that statement. In fact, they rather seem to believe that more recently, a rate rise has been omitted exactly in view of the past and possibly ongoing problems in the money markets. In this view, had there been no financial turbulences, interest rates would have definitely increased on pure price stability considerations, given the upwards pressure on price stability. Giving some faith to a possible dilemma as described above, this discussion poses the policy challenge of how to react in the interbank market in a situation of weak liquidity without affecting central monetary policy conditions. First, we start with the quantitative definition of price stability as defined by the ECB's Governing Council. Second, we analyse briefly the monetary transmission mechanism in the Eurozone and the interbank money market of the Eurosystem. Third, we discuss the separability of the objective of price stability and the task of lender of last resort and the advantages and disadvantages of separating monetary and money market policy. Fourth, we point to the dangers of lowering the money market interest rate analysing the yield curves and real interest rates in the United States and the Eurozone. Finally, we conclude that the ECB has never defined exactly, also not in the Monetary Dialogue with the Committee on Economic and Monetary Affairs (ECON), what it considers to be the 'medium term'. Although the ECB has defined price stability clearly, it would be even better if it went further and define the 'medium term' more precisely. This would enhance the transparency of the ECB and would make the accountability of the ECB towards the ECON Committee much easier.

Quantitative definition of price stability

The ECB's Governing Council has defined price stability as "a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%. Price stability is to be maintained over the medium term". The Governing Council has also clarified that, in the pursuit of price stability, it aims to maintain inflation rates below, but close to, 2% over the medium term. The medium-term orientation gives the ECB the flexibility required to respond in an appropriate manner to the different economic shocks that might occur. The medium-term orientation reflects the fact that monetary policy cannot, and therefore should not, attempt to fine-tune developments in prices or inflation over a few weeks or months.

¹ The author gratefully acknowledges the helpful comments of Drs. Edin Mujagic, MSc and the excellent research assistance of Mr. Rob Nijskens, MSc.

Moreover, the medium-term orientation makes it possible for monetary policy to take into account concerns about output fluctuations, without putting price stability at risk. It is impossible for any central bank to keep inflation always at a specific point target or to bring it back to a desired level within a very short period of time. Consequently, monetary policy needs to act in a forward-looking manner and can only maintain price stability over longer periods of time. For a wide variety of shocks (e.g. demand shocks that move output and prices in the same direction) a prompt reaction by monetary policy is often adequate and will not only preserve price stability but also help to stabilise the economy. But there are other types of economic shocks (e.g. of a cost-push nature, like oil price hikes) that move output and prices in opposite directions.

An excessively aggressive policy response to restore price stability in a very short span of time may cause significant output and employment volatility, which over a longer horizon, could also affect price developments. In these cases, it is widely recognised that a gradual response of monetary policy is appropriate both to avoid unnecessarily high volatility in real activity and to maintain price stability over a longer horizon. Nevertheless, it should be mentioned that the ECB has never defined exactly, also not in the Monetary Dialogue with the Committee on Economic and Monetary Affairs (ECON), what it considers to be the ‘medium term’. Although the ECB has defined price stability clearly, it would be even better if it went further and define the ‘medium term’ more precisely. This would enhance the transparency of the ECB and would make the accountability of the ECB towards the ECON Committee much easier.

The monetary transmission mechanism in the Eurozone²

The monetary transmission mechanism is the process through which monetary policy decisions are transmitted to the economy and the price level. The ECB starts with announcing an official policy rate of interest, after which it provides liquidity to banks on the money market. The banking system demands this money to meet public demand for currency, clear interbank balances and meet the reserve requirements imposed by the central bank. In this way, the ECB can steer short-term money market interest rates. The changes in these rates affect, through the financial system, other interest rates such as short-term credit and deposit rates. Also, expectations of future official interest rate changes affect longer-term market interest rates, since these reflect the path of expected changes in short-term interest rates. However, the impact of this on (very) long-term maturities (i.e. maturities of 10 years or more) is less direct.

Furthermore, these changes in interest rates affect asset prices and wages, and also household consumption and savings decisions and firm investment decisions. This may affect real variables in the economy. Additionally, the change in asset prices may have income and wealth effects on consumption and investment. In the end, this leads to a change in aggregate demand and prices.

Another main channel to influence prices is inflation expectations. This depends heavily on the credibility of the central bank with the private sector in pursuing its objective, namely maintaining price stability. When this credibility is high, the ECB can guide agents’ expectations of future inflation and can thereby influence their wage- and price-setting behaviour. As the ECB is forward looking, these expectations play an important role in conducting monetary policy.

² European Central Bank (2004), The Monetary Policy of the European Central Bank, <http://www.ecb.int/pub/pdf/other/monetarypolicy2004en.pdf>.

However, these transmission mechanisms work with considerable lags, which are long, variable and uncertain. Also, there are always shocks influencing economic developments and prices. Monetary policy therefore needs not only to monitor the transmission of monetary policy changes but also to take into account all other developments relevant for future inflation, in order to avoid these having any impact on longer-term inflation trends and expectations in a way that is inconsistent with price stability.

Now that inflation has reached a record high last January³, it is imperative for the ECB to be consistent with the price stability objective. Although expectations are forecast to be quite stable at 1.9 by the ECB's survey of professional forecasters⁴, the ECB has to remain hawkish to keep these expectations this way⁵. Moreover, the second-round effects such as higher nominal wage demands may have an effect on actual inflation and should be taken into account by the ECB. Although developments with regard to inflation expectations are very important, a word of caution is also needed. The fact that inflation expectations are or remain (relatively) low does not necessarily mean that the actual inflation over the same time horizon will behave as expected. In the 1970s the industrialised countries have experienced a period of stagflation, whereby the actual inflation rate increased sharply. Prior to that, inflation expectations indicators did not point to an increase in future inflation. So, the ECB should be looking to inflation expectations, but should not rely too much on them and also look more closely to the second-round effects. These second-round effects are not reassuring in the Eurozone.

Monetary policy is implemented by managing liquidity and steering interest rates in the interbank money market. However, the ECB also signals its future monetary policy stance to the interbank money market. For these operations to work, the ECB has to ensure a proper functioning of the interbank money market of the Eurosystem.

The interbank money market of the Eurosystem⁶

The interbank money market is the market used by banks, investment funds and other intermediaries to raise short-term funds. Especially credit institutions are active here, since they need to refinance, hedge short-term positions and meet reserve requirements imposed by the Eurosystem (the ECB and the national central banks). The Eurosystem or shortly the ECB uses this market to control the short-term interest rates as a first step in the transmission of monetary policy. This follows from the Governing Council's decision to set key interest rates, of which the minimum bid rate as the floor for the price of central bank liquidity is the most prominent. To influence money market interest rates at longer maturities, the ECB communicates clearly its strategy and policy intentions. In the end, this affects the outlook for price stability. By using its main refinancing operations (MROs), the ECB aims to supply the necessary liquidity to make the banking system operate smoothly, so that the short-term interest rates remain properly aligned with the monetary policy stance. Hereby, the ECB tries to keep the shortest-maturity money market interest rates stable and close to the minimum bid rate. Narrow spreads are allowed, but large and/or volatile spreads would undermine the clarity of the signal provided by the minimum bid rate and ultimately the credibility of the operational framework.

³ The Financial Times (2008), Inflation hits 14-year high, 01-02-2008.

⁴ http://www.ecb.int/stats/prices/indic/forecast/html/table_hist_hicp.en.html

⁵ The Economist (2008), Global Inflation: A Delicate Condition, 17-01-2008

⁶ This section draws heavily on: European Central Bank (2008), The Analysis of the Euro money market from a monetary policy perspective, *ECB Monthly Bulletin*, February.

The short-term interest rates on the money market are directly affected by liquidity conditions, while longer maturity rates depend on market expectations of future minimum bid rates. Therefore, an analysis of longer maturity rates can detect if the money market functions well and if market participants have a clear understanding of the monetary policy strategy and its implementation. If there is excess volatility, this may be impaired.

However, the money market can be affected by turmoil in the financial markets, as is happening at the moment. The main characteristic of this turmoil is that it does not originate from liquidity conditions or expectations. In this case, the ECB should use liquidity management to steer the shortest-maturity rates in the money market and to support market confidence. The ECB has managed to do this in the recent period, as overnight interest rates (EONIA) have stabilised around the minimum bid rate and volatility has decreased; also the tensions in the money market at longer maturities have been smoothed somewhat.

Another use of the money market is the monitoring of the yield curve, as monetary policy-makers can assess the transmission process by monitoring expectations in the financial markets. It is important to assess whether the market interest rates reflect a correct future path of minimum bid rates, consistent with the monetary policy stance. If so, the policymakers can maintain a high degree of predictability of monetary policy in the short term, as well as in the long term. Also risk and liquidity premiums can be used to assess market expectations of key ECB interest rates and of the perceived uncertainty in the market. If there is high uncertainty about interest rates and changes in risk premiums affect long-term rates, there may be problems with transmission mechanism of monetary policy. We have experienced these kind of problems in the past months.

Ultimately, what is important is that the ECB maintains a clear distinction between the different actions on the money market: on the one hand, the monetary policy decisions taken to maintain price stability, and on the other hand the liquidity management decisions taken to smooth the functioning of money markets and thereby enhance monetary policy transmission. The latter also includes the distribution of liquidity within reserve maintenance periods and across different maturities.

This reflects the approach of the Eurosystem to monetary policy implementation: it relies largely on self-regulating market mechanisms. This is also demonstrated by the ECB's limited presence in the market: it uses very few direct interventions in the money market, only once a week. This frequency is only increased in periods of financial market stress, such as the situation of the present day.

Separating the objective of price stability and the task of lender of last resort

The ECB has provided the market with liquidity in the last several months, to alleviate the banks' need for credit. The premium on overnight money market interest rates had surged, which made it harder for banks to achieve liquidity.⁷ However, commercial banks can always fund themselves through the ECB's marginal lending facility. The ECB could, in principle, have solved that liquidity problem if it would have lowered the interest rate on the marginal lending facility, which is effectively the ceiling for the money market rates. It would be interesting to know why the ECB excluded this action.

⁷ The following section draws on: Jürgen Stark (2007), Monetary Policy and the money market: key principles and recent experience, Speech delivered at Bayerischer Bankenverband, Munich, 15-11-2007.

Liquidity has been provided to the market in a very sophisticated manner: the funds were auctioned anonymously to the highest bidder, which makes this provision different from standard lender of last resort (LOLR) policies. It has also only led to a redistribution of liquidity and not to an addition of new liquidity to the market. The timing of this liquidity provision has just changed within the reserve maintenance period and its average maturity has increased.

Also, this anonymous auction has an effect on the stigma attached to lending from the central bank. This negative perception of liquidity provision makes banks reluctant to go to the ECB for liquidity. Since this method is anonymous, it is more effective as it alleviates this negative perception. But it also opens the door for misuse by bigger banks. Bigger banks got a large share of the cheap funding at that time, which they could pass on to the smaller banks, at a premium, using ECB's liquidity to make profits instead of using it to solve their own temporary liquidity problems. Something similar is happening in the US, where a temporary lending facility seems to be misused by some banks.

Moreover, the ECB clearly stated that these injections were aimed specifically at maintaining stability in the financial markets and increasing the confidence of market participants. It especially states that these operations are not aimed at supporting individual institutions, as this may create moral hazard in the banking sector. As the ECB has to control overnight money market rates also, the excess liquidity has to be taken out again. Thus, these liquidity injections are only a temporary solution for the markets.

These actions may be seen as stepping up as a lender of last resort to banks in the Eurozone. Has this become a communication problem for the ECB? President Trichet commented half year ago the following about these actions: 'It has not to be mixed with the monetary policy stance. These are two different things.'⁸ However, he also announced recently that this might not exclude a change in rates, even though inflation has reached a record high⁹. This may indeed be confusing and may call for a clearer separation of the monetary policy task ("maintaining price stability") and the money market policy task ("ensure a proper functioning of the money market"). Below, a schematic presentation of the advantages and disadvantages of separating these tasks is presented.

⁸ Thomson Financial (2007), Trichet says ECB liquidity injections separate from monetary policy decisions, 6-9-2007.

⁹ The Financial Times (2008), ECB chief opens door to rate cuts, 7-2-2008.

Advantages and disadvantages of separating monetary and money market policy

Advantage	Disadvantage
Credibility enhancement: less bailouts mean a more stable and conservative stance of the ECB, which promotes credibility in both monetary policy and money market policy (Ralph Atkins) ¹⁰	Many short terms in the money market constitute a medium term, which may interfere with the monetary policy of the ECB. By signalling the monetary policy stance and strategy to the market, the ECB affects the interest rates at longer maturities (Sylvester Eijffinger) ¹¹ .
A credible monetary policy provides an anchor in these times of financial market volatility and increased uncertainty. Liquidity policy may need to be more active to make the money market function better; however, this may interfere with the understanding of monetary policy intentions (Jürgen Stark). ¹²	Conduct of monetary policy relies on well-functioning of the money market, as the open market operations to 'set' the interest rate are conducted on the money market. If both tasks are separate, interest rates may be changed by lender of last resort (bailout) practices, which can impair monetary policy. (Jürgen Stark).
Separating both tasks can create a better guarantee for price stability, since it reflects a clear policy stance. It will alleviate the confusion about the ECB maybe using monetary policy to resolve this credit and liquidity crunch, instead of money market policy (Nouriel Roubini). ¹³	By injecting liquidity, overnight interest rates are influenced. If the ECB doesn't take out this liquidity again, commercial banks need to meet reserve requirements and want to get rid of this money, which lowers overnight rates. This impedes monetary policy, so there is a conflict between monetary policy and the functioning of the financial system (Ralph Atkins).
The focus on price stability exhibits a long-term view by the ECB. In these times of high inflation and especially high inflation expectations, the central bank should be a beacon of stability. The ECB should be leading the financial markets, independently. When separating the tasks, the ECB can concentrate on maintaining price stability (Sylvester Eijffinger).	This method of liquidity provision cannot solve the problem at the root of this financial crisis, namely the many off-balance sheet activities and bad exposures of banks. This has eroded market confidence, which cannot be gained back by pumping liquidity into the market (Nouriel Roubini).
The financial markets consist of private sector participants: they have to bear responsibility for proper conduct. The central bank cannot influence this very much. (Jürgen Stark).	Lending at greater maturities is preferred and may solve problems; however, this also influences overnight rates and thus monetary policy (Ralph Atkins).
By intervening too much in money markets, central banks take more risks onto their balance sheets (by accepting wider collateral). Also, it does not reduce the fundamental reason of the crisis, namely the uncertainty of losses from subprime mortgages (The Economist) ¹⁴ .	"No principle can provide concrete guidance for how to deal with all the contingencies we may face in a complex and uncertain world, in particular with those uncertainties labeled 'unknown unknowns'. "(Jürgen Stark).
A conflict of interest can arise when both tasks are not separated, since a change in interest rates has opposite effects in the monetary policy vs. the lender-of-last-resort policy. Also, lender-of-last-resort actions will change the distribution of reserves among banks, possibly increasing systemic risks (Charles Goodhart) ¹⁵ .	Since the central bank is virtually the only available source of immediate last resort liquidity, it is hard to separate the both tasks; both policies must be balanced in order to maintain systemic stability (Charles Goodhart).

¹⁰ The Financial Times (2008), Central bankers digest the lessons of the credit crunch,, 12-2-2008.

¹¹ Het Financieele Dagblad (2008), Interview with Sylvester Eijffinger, 16-2-2008.

¹² Jürgen Stark (2007), Monetary Policy and the money market: key principles and recent experience, Speech delivered at Bayerischer Bankenverband, Munich, 15-11-2007.

¹³ Roubini, Nouriel (2007), Coordinated Central Banks Liquidity Injections: Too Little Too Late, 12-12-2007, <http://www.rgemonitor.com/blog/roubini/232095>

¹⁴ The Economist (2007), Central Banks: A dirty job, but someone has to do it, 13-12-2007.

¹⁵ Goodhart, Charles and Schoenmaker, Dirk (1995), Should the Functions of Monetary Policy and Banking Supervision Be Separated?, *Oxford Economic Papers*, 47(4), 539-560, October.

Dangers of lowering the money market interest rate

There has been much pressure on the ECB to, instead of only providing liquidity on the money market, also lower the policy interest rates to alleviate the credit crisis and make it easier for financial institutions to obtain funds. However, there are some reasons why this can be dangerous for the economy as a whole.

First, inflation has reached record heights in the last months, so it is not sensible to decrease interest rates. This may be a serious impairment of price stability, as inflation may grow even more.

Second, the real interest rate will become quite low when we combine a surge in inflation with a lowering of the interest rate. Also the difference between the US and EU real interest rate is not high. There is even a danger that real interest rates may become negative when inflation keeps increasing and the interest rate will be indeed lowered. Then, we risk ending up in the situation Japan has been in for more than a decade: people do not want to save anymore, and investments drop.

Third, the effects of a change in the interest rate are not clear while the money market is as volatile and uncertain as it is now. In the US this has already become apparent: the Federal Funds Rate has been lowered recently in two consecutive steps by 1.25% and this has not helped the financial markets sufficiently. In many cases the interest rates that consumers and companies have to pay for financing and funding, have actually increased since the Fed lowered the Federal Funds Rate.

Fourth, there will be the second-round effects, as already stipulated by President Trichet on many occasions. The nominal wage demands will increase and actual inflation will rise again. The only situation in which the ECB would maintain its official interest rates is when Eurozone economic growth falls too far behind. In all other situations, when the money market have recovered, the ECB should increase the official interest rates again.

Now let us look at some empirical evidence for the yield curve development and the path of the (ex ante) real interest rate. As we can see from the figures below, the yield curves for both the US and the Eurozone have dropped and steepened a lot in the last year.

The dropping of the US yield curves is, of course, due to the drastic lowering of short-term interest rates in the United States. When we compare this to the Eurozone, we clearly see that the drop of the Eurozone yield curve is not as big as the drop of the US yield curve. This drop may be fuelled by expectations that the ECB may decrease the official interest rates in the future. This means that the ECB might have a serious communication problem since its intention is not to lower these rates as stated very recently by President Trichet, especially with the high actual Eurozone inflation of 3.2%.

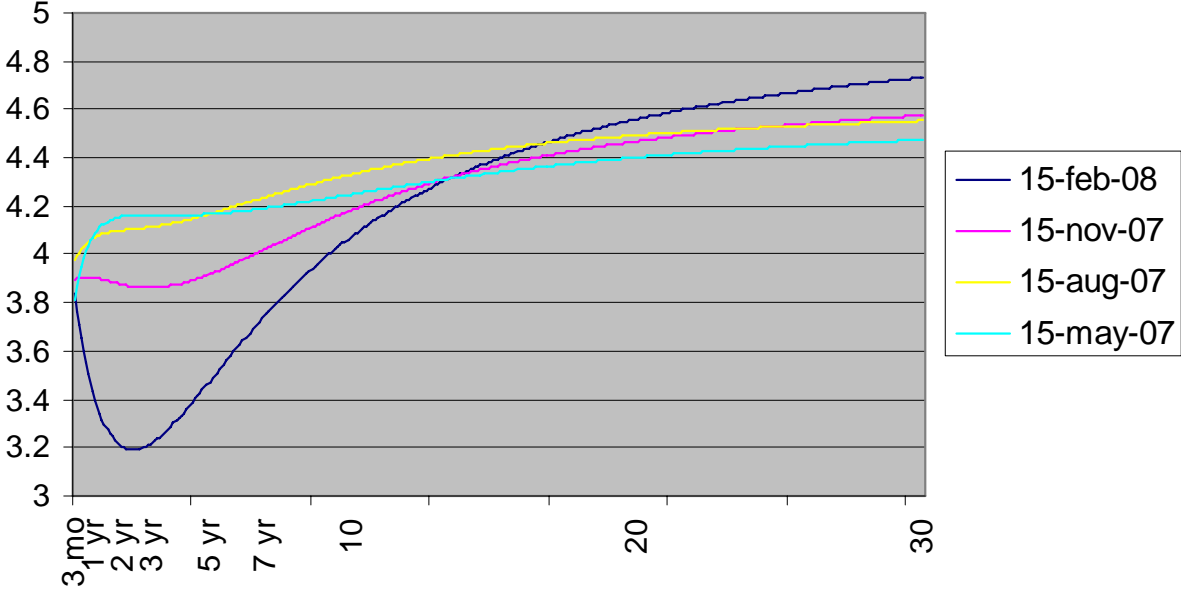
More interesting is the change in the slope of the yield curve, in both the US and the Eurozone. This provides two key pieces of information: an indication of market expectations on interest rates, and global investors' perception of risk¹⁶.

One important observation from both yield curves is that the (very) long-term interest rates have not changed so much. This steepening of the yield curves indicates that the market expects (short-term) interest rates to rise in the future. Another interpretation might be that economic activity is expected to pick up in the future and the ECB, but also the Fed will need to raise their official interest rates again to curtail future inflation.

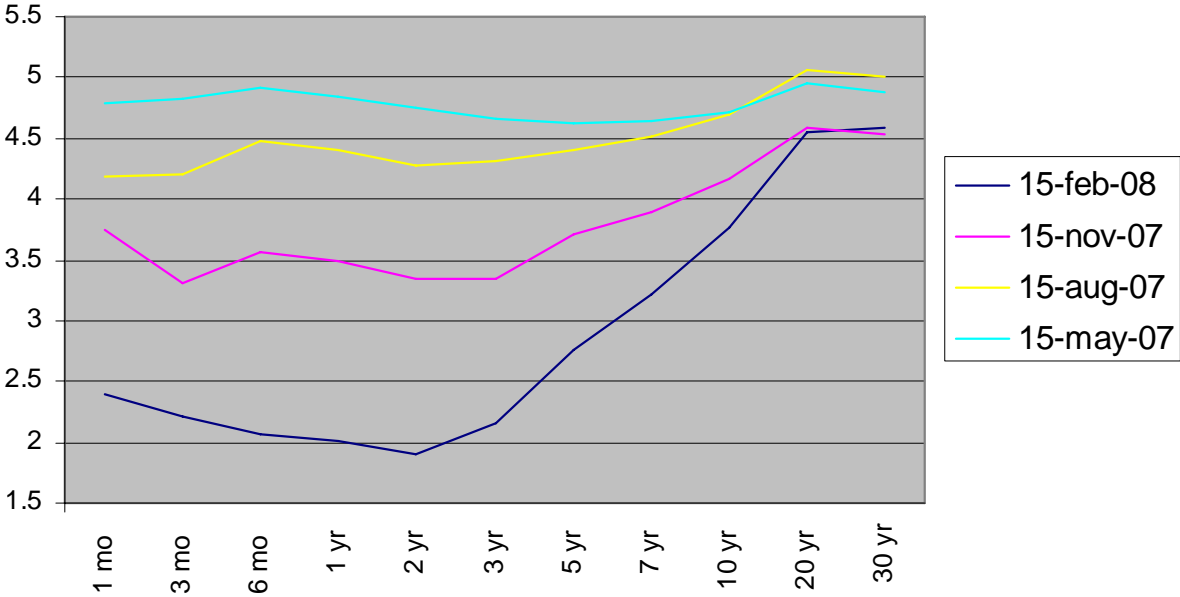
¹⁶ European Central Bank (2008), The new Euro Area yield curves, Box 1: Usefulness of the yield curve for monetary policy purposes, *ECB Monthly Bulletin*, February.

Evidently, the slope of the US yield curve is much steeper than the slope of the Eurozone yield curve. This indicates that the changes that the US will go through will be much more severe, which may be attributed to the excessive lowering of the Fed Funds Rate.

Eurozone yield curve



United States yield curve



The other important observation is that medium-term interest rates are significantly higher than short-term rates. This can indicate a higher perception of risk among investors, which can naturally be explained by the turmoil in the financial markets. There is still a lot of uncertainty about mainly exposures to subprime mortgages by major banks and other financial institutions. This adds to the usual term premium that investors attach to interest rates to cover unobservable risk. These developments should serve as a warning for the ECB and particularly for the Fed, since the recent lowering of the Federal Funds Rate does not appear to have helped and will not help the US economy.

The real interest rate in the United States and the Eurozone

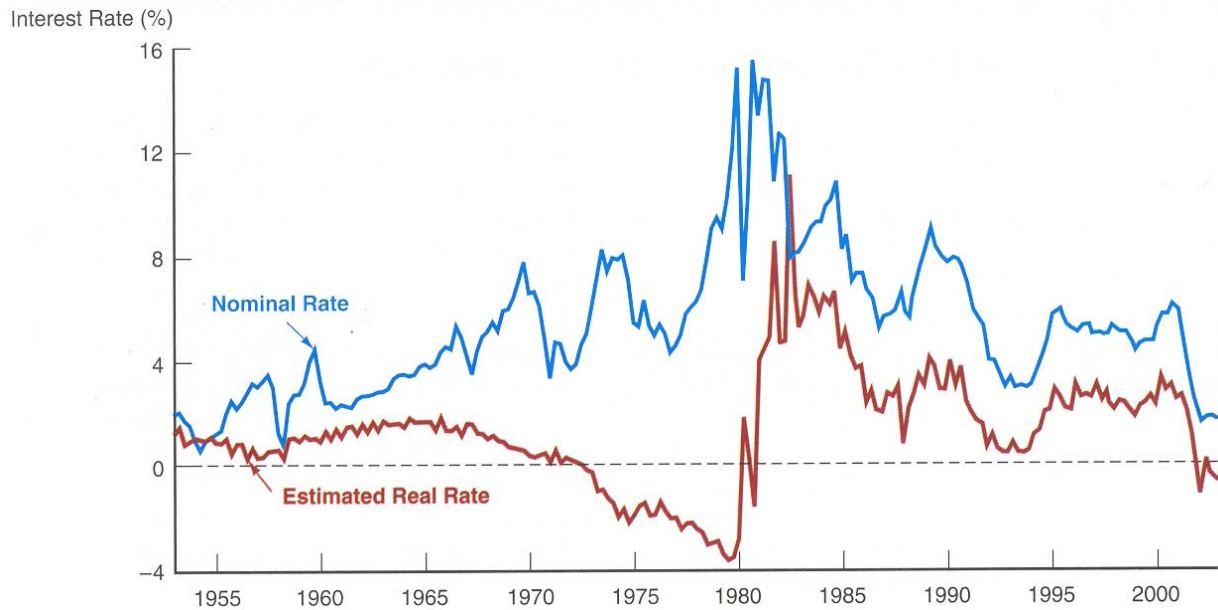
Taking into account current events, the real interest rate (the nominal interest rate corrected for actual inflation) is now close to zero in the Eurozone and already negative in the United States. With the three-month nominal interest rate in the Eurozone being 3.9% and actual inflation reaching 3.2%, the real interest rate is only 0.7% in the Eurozone. However, in the US, the three-month nominal interest rate equals only 2.2%, but actual inflation averages 4% already, which implies a real interest rate of -1.8%¹⁷.

According to Governor Frederic Mishkin¹⁸ of the Board of Governors of the Federal Reserve System, monetary policy should focus on this real interest rate instead of the nominal one, as this takes actual inflation and inflation expectations into account and is a better measure for the tightness of monetary policy than the nominal interest rate. Mishkin uses expected inflation to calculate the (ex ante) real interest rate, which is a proper procedure to approximate the real interest rate than using actual inflation. The figures below display the resulting real interest rates in the US and the Eurozone.

¹⁷ Inflation data from the ECB Statistical Data Warehouse at <http://sdw.ecb.europa.eu/> and the Federal Reserve Bank of Cleveland at <http://www.clevelandfed.org/research/inflation/US-Inflation/mcpi.cfm>

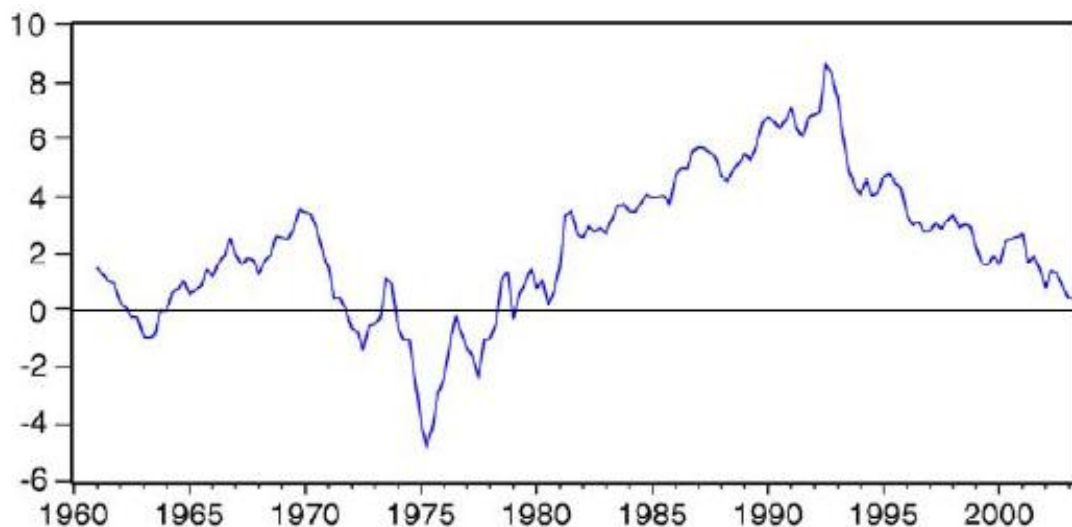
¹⁸ Mishkin, Frederic S. (1982), The Real Interest Rate: An Empirical Investigation, NBER Working Papers, No. 0622, NBER, Cambridge MA.

United States real interest rate



Source: Real and nominal interest rates (Three-month Treasury bill), 1953-2002), in *The Economics of Money, Banking and Financial Markets* by Frederic S. Mishkin (2004).

Eurozone real interest rate



Source: Cour-Thimann, Philippine, Pilegaard, Rasmus and Stracca, Livio (2006), The output gap and the real interest rate gap in the euro area, 1960-2003, *Journal of Policy Modeling*, 28(7), 775-790.

As shown in these graphs, periods of (nearly) negative real interest rates never last very long. Savers will effectively be paying for saving, meaning that they won't save anymore. Of course, this will lead in due time to a drop in investments and increase the risk of stagflation, which cannot be solved by monetary policy anymore. This situation occurred during the 1970s in the United States: the graph with US real interest rate shows a persistently negative real exchange rate, whereas the actual inflation rose up to 14% then.

Conclusions

At this moment inflation expectations are increasing and real interest rates are decreasing, particularly in the United States¹⁹. This demonstrates that the Fed is choosing the wrong model for its monetary policy: interest rates are decreased to accommodate the demands of the financial markets, since they need lower interest rates to solve their liquidity problems. However, Wall Street will keep demanding more and more, since this is no sustainable way to go. One might compare Wall Street to an alcoholic, who needs more and more alcohol (interest rate decrease) to keep the stock markets on going. Therefore, with real interest rates turning negative, the Fed has taken a huge gamble²⁰. It is a one-way policy: if it helps the financial markets to recover and the economy to expand, it has succeeded. However, if the real interest rate turns negative for a longer period of time, the savings rate (which is already very low) will decrease even more and a recession will be inevitable. Nevertheless, the Fed's strategy could put the US economy into stagflation.

The ECB, however, focuses exclusively on price stability. The focus on price stability exhibits a long-term view by the ECB. In these times of high inflation and especially high inflation expectations, the central bank should be a beacon of stability. The ECB should be leading the financial markets, independently. When separating the tasks, the ECB can concentrate on maintaining price stability. This is also one of the reasons that real interest rates in the Eurozone have never turned negative in the (almost) decade that the ECB has been in charge of monetary policy. This tells us that the ECB does well in focusing on price stability, and the separation of monetary policy and money market policy is good to maintain this stance. However, one should realise that many short terms in the money market constitute a medium term, which may interfere with the monetary policy of the ECB. Nevertheless, it should be mentioned that the ECB has never defined exactly, also not in the Monetary Dialogue with the Committee on Economic and Monetary Affairs (ECON), what it considers to be the 'medium term'. Although the ECB has defined price stability clearly, it would be even better if it went further and define the 'medium term' more precisely. This would enhance the transparency of the ECB and would make the accountability of the ECB towards the ECON Committee much easier.

¹⁹ Inflation Central: TIPS Expected Inflation Estimates,

<http://www.clevelandfed.org/research/inflation/TIPS/index.cfm>

²⁰ "Bernanke's reflation gamble may work too well", Martin Wolf, 30-01-2008,

<http://www.ft.com/cms/s/0/8bd26b04-ce9e-11dc-877a-000077b07658.html>

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<http://www.ft.com/cms/s/0/8bd26b04-ce9e-11dc-877a-000077b07658.html>

SEPARABILITY OF ECB OBJECTIVES AND TASKS:

PRICE STABILITY VS. LENDER OF LAST RESORT

Briefing Paper for the Monetary Dialogue of March 2008 by the Committee on Economic and Monetary Affairs of the European Parliament with the President of the European Central Bank

JEAN-PAUL FITOUSSI

Executive Summary

Both the action and the communication strategy of the ECB rely on the assumption, explicitly stated, that inflation is always a monetary phenomenon, and that the interest rate instrument should be devoted exclusively to dealing with inflation pressures. According to this prior, the ECB structured its intervention in the interbank market around short term liquidity injections, leaving the interest rates unchanged. This strategy is different from the one pursued by the Fed, that instead used (especially in a first phase) interest rate cuts to reduce the interbank rates. Both strategies were efficient in reducing short term interest rates to their 'normal' level. But they proved different in what concerns their effect on longer term rates. The rate reduction of the Fed also had effects on long run rates, while the spread in the euro zone remained quite high. Thus, from a macroeconomic perspective the two strategies are different, the one followed by the ECB being more restrictive. We may think that this was not an unintended consequence, as the ECB had explicitly asserted its will to tighten its monetary stance. The Briefing paper concludes highlighting the risk, for the ECB credibility, of such an indirect strategy.

During the last audition in front of the Committee for Economic and Monetary Affairs President Trichet defended the ECB stance in the midst of the subprime crisis, advancing a revised and sophisticated version of the neutrality argument.

President Trichet's argument can be summarized as follows:

- *First*, in line with monetarist thinking, inflation is an essentially monetary phenomenon, at least in the medium-to-long run. As I noted in a previous Briefing Paper, this essential and somewhat radical assumption explains the particular importance that money aggregates growth takes in the actions and communication of the ECB; it also explains the refusal to consider differences between headline and core inflation when assessing monetary conditions in the Euro area.
- *Second*, in accordance with the treaties, any other policy objective of the ECB has to be subordinated to the inflation objective.
- *Third*, the main instrument to affect the intermediate objective of money growth remains the interest rate, in spite of the increasing difficulties posed by the development of financial markets. As a consequence, interest rates only have to be used to keep inflation near the objective level of around 2%.
- *Fourth*, other problems, as for example ensuring liquidity needs of the banking sector in order to avoid a systemic crisis, need to be addressed without hampering the main objective of price stability; thus, on one side interest rates cannot be used for other objectives, and on the other any other operation by the ECB should not affect the medium run target growth rate of money supply.

Consistently with these arguments, the ECB has followed in the past months a straightforward and predictable strategy, both in its actions and in its communication strategy.

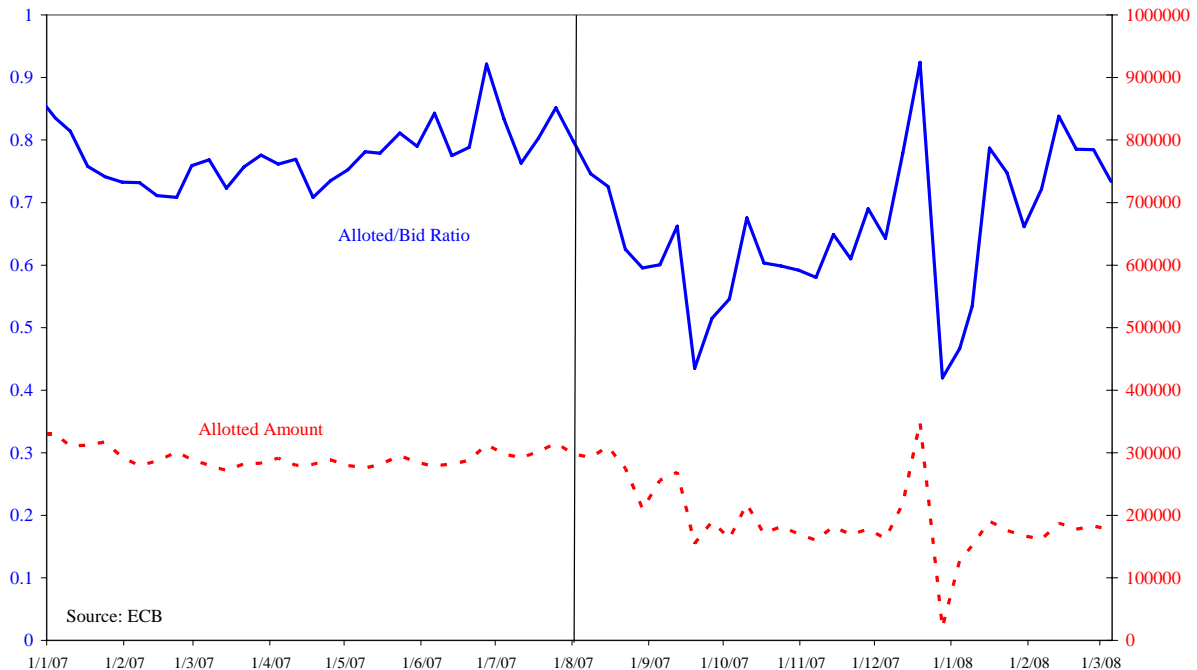
The Crisis and the Need for a Lender of Last Resort

The subprime crisis represents a typical case in which solvency and liquidity problems are difficult to disentangle. Nevertheless, it is almost a unanimous opinion that in late August and in September the crisis was hitting the credit sector without regard to the actual solvability of the individual institutions, thus creating an important systemic risk. Thus, in spite of the difficulties for central banks to act as Lenders of last resort (LLR) in a context of increasing sophistication of the financial system, the praise for the early intervention of the Fed and the ECB was unanimous. Nevertheless, this intervention took a very different form across the ocean.

The ECB and the Fed in Action, Fall 2007.

The ECB remained faithful to its credo and to its priorities. The key Euro area interest rates stayed unchanged since the latest rise, in June 2007 that brought the marginal lending facility rate at 5% and the Main Refinancing Rate (REPO) at 4%. At the time the ECB had hinted about further raises in the fall that it did not carry on. On the other hand, the grimmer growth outlook, and the significant rate cuts of the Fed, that triggered a troublesome appreciation of the Euro, did not induce the ECB to revise downwards its rates, nor to foresee possible cuts in the future.

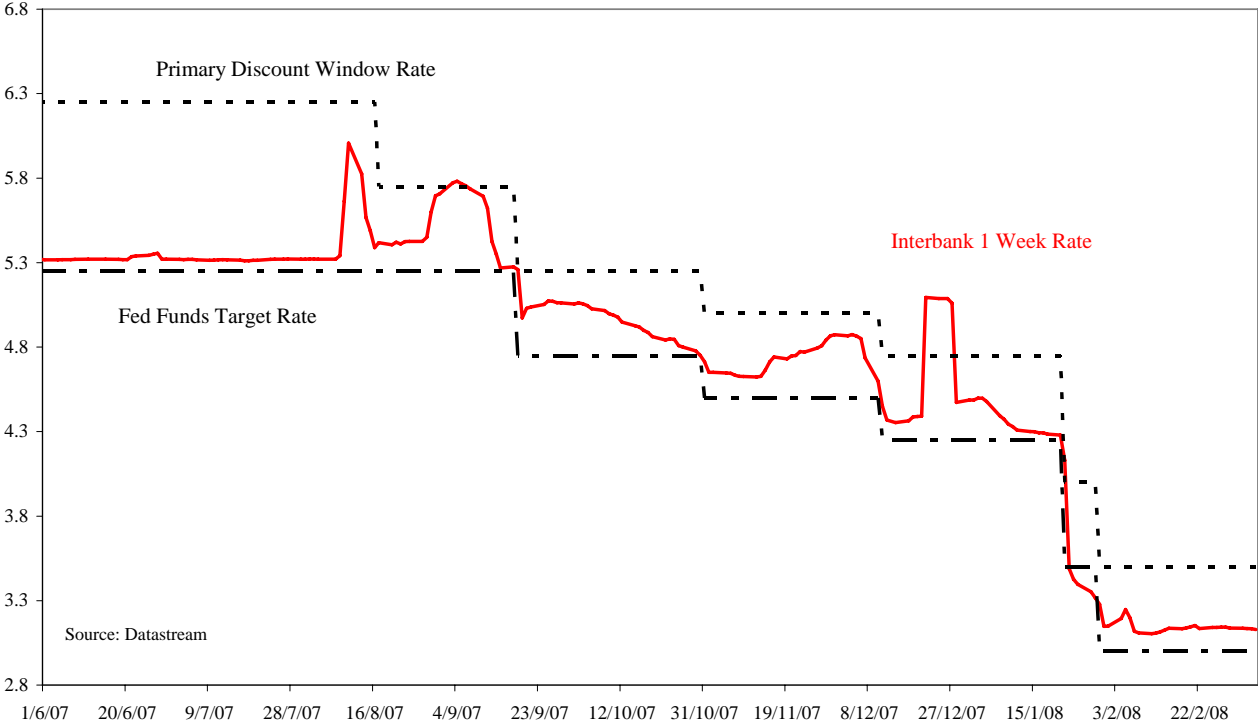
Fig 1 - ECB Main Refinancing Operations



The subprime crisis was primarily dealt with through short term refinancing operations that provided the very short term liquidity that the system needed, without nevertheless increasing the long term amount of money. If we look at figure 1, where I plotted the allotted funds in the weekly auctions for REPO markets (7 or 14 days), and the ratio of the allotted value over the bid value (a broad indicator of demand rationing), we can observe that no major trend appears between the January-July and the August-January periods. In fact, the average allotted funds even slightly decreased in the second half of the year. Thus, overall, liquidity injections in the system stayed constant. What changed, on the other hand, are the variability of both the allotted funds and the ratio of satisfied bids. These two facts, taken together with the lack of intervention on interest rates, prove that the ECB was eager to provide the required liquidity to the system, but only on a very short term, to avoid fuelling inflation.

The strategy pursued by the Fed was rather different. At least in an initial phase, the US central bank used the interest rate instrument to curb the interbank rates (LIBOR), and to inject liquidity into the system. The first reaction of the Fed was a reduction of the Primary Discount Rate, in order to narrow the band for short rates (figure 2). Subsequently, the Fed cut all rates in five different occasions, keeping the window constant. Overall, Fed Funds target rates went down 225 points in 4 months.

Fig 2 - Federal Reserve Target Rates and Interbank Short Rate.



Late in the Fall, the Fed also turned more massively to open market operations, most notably through the creation in December 2007 of the Term Auction Facility (TAF), where banks could borrow using a broader set of assets as collateral, thus transferring part of the risk of bad loans to the Fed. The TAF has been successful in providing the short term liquidity that the system needed. Facing continuing turbulence on credit markets, on March 7, 2008, the Fed announced that it will almost double the amount allotted through the TAF in the auctions due to take place in March²¹.

²¹ <http://www.federalreserve.gov/newsevents/press/monetary/20080307a.htm>

Fig 3 - ECB Target Rates and Interbank Short Rate.

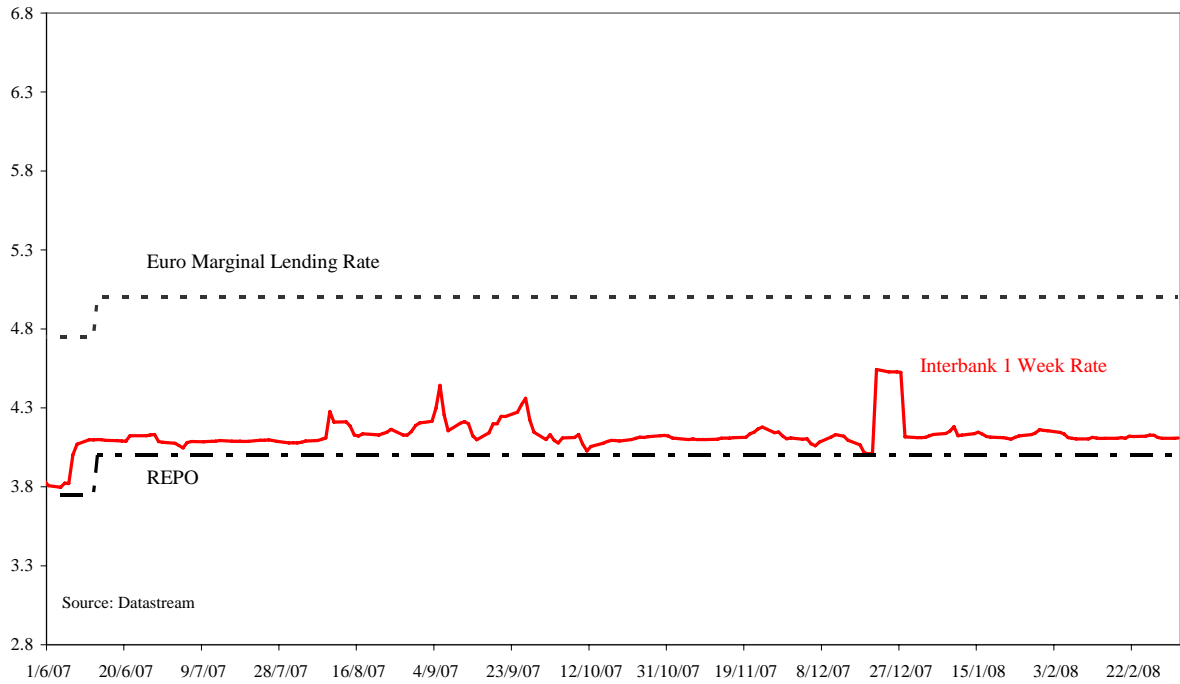
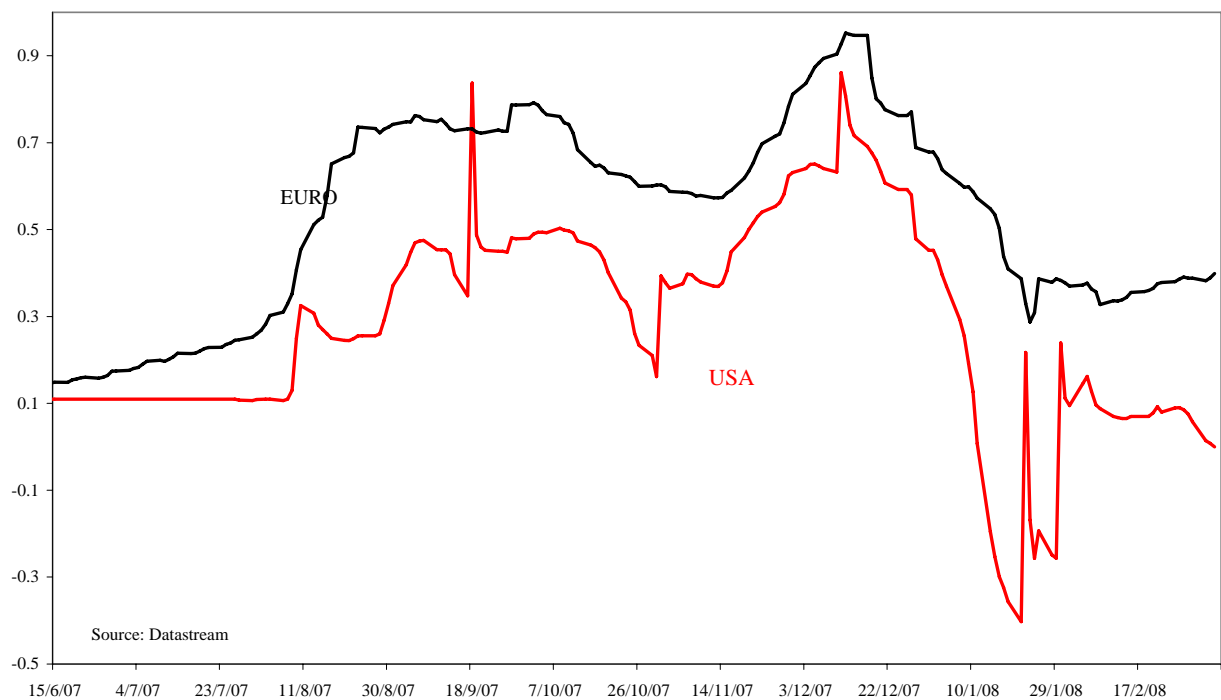


Figure 3 shows the reference interest rates for the ECB and the 1 week Euribor. By comparing it with figure 2, it may easily be verified that while very different, both strategies succeeded so far in bringing down to acceptable levels the spread between short term rates in the interbank market and the target rates. It may actually be said that the ECB was more successful in stabilizing short rates, even if this is explained to a large extent by the different severity of the crisis in the two zones.

Fig 4 - Spread between 3 Months Interbank Rates and Target Rates



Nevertheless, broadening the perspective we realize that the two strategies yielded very different outcomes in the credit markets, with potentially important macroeconomic consequences.

The choice of neglecting interest rates and focussing on short term liquidity injections, while successful to compensate the short term rate hikes, was not neutral with respect to the yield curve. Figure 4 shows the spread between the long term (3 months; higher maturities yield very similar graphs) interbank rates and the target rates for the two areas. It can be seen that this spread was comparable in June 2007, while today it is much higher in the Euro zone than in the US. Access to long term credit is today more expensive in Europe. The strategy followed by the Fed, as of today, seems to have been more neutral with respect to the yield curve, and to have worked in providing liquidity to the system while not tightening the monetary stance.

What the recent events seem to have proven, furthermore, is that it is impossible to cut the link between interest rates and liquidity. Using both instruments (and even mainly interest rates, as seems to have been the case with the Fed) is less disruptive and more effective. After all, the existence of such a link should not come as a surprise. We have known for a long time from standard textbook analysis that the link between interest rates and liquidity may be broken either because interest rates are abnormally low, or because money is perfectly neutral. The first case, known as the “liquidity trap”, is a pathological situation in which monetary policy is notoriously ineffective (Japan is the most famous and recent example of such a case). For what concerns money neutrality on the other hand, it may be argued convincingly that it holds in the long run; but today only the ECB seems ready to behave as if money was neutral also in the short run.

Unintended Consequences or Strategic Choice?

We may attempt at a different explanation for the behaviour of the ECB. Maybe, instead of being excessively dogmatic, it may have simply acted strategically. The ECB could have been aware of the consequences on long term rates of its decision to keep rates unchanged; then, it could have willingly let the markets carry on the restriction of the monetary stance that it had planned and announced before the summer.

Nevertheless, if this explanation were true, the consequences for the macroeconomic environment would not be unintended; but we could have even more serious unintended consequences on the credibility of the institution. Markets would rightly feel that the ECB uses external shocks to implement its policies without clearly stating the objectives. For an institution that has often been accused in its short history to be insufficiently transparent in its decision process and in its policy choices, this could become an even harder problem to resolve than excessive inflation or a recession.

We have to admit though that the period is characterised by a growing uncertainty about the level of the “natural rate of interest”. It may well be that the crisis did have an effect on the latter, may be increasing it, and that we would be in a position to judge what was the best strategy only in retrospect. But our imperfect knowledge about the level of the natural rate of interest itself should lead us to prefer the strategy aimed at combating the gravest danger: depression and debt deflation.

UNDER GRAVE FINANCIAL INSTABILITIES THE LOW INFLATION OBJECTIVE PLAYS AT BEST A SUBORDINATE ROLE – AND RIGHTLY SO

**Briefing Paper for the Monetary Dialogue of March 2008 by the Committee on
Economic and Monetary Affairs of the European Parliament with the President of the
European Central Bank**

LEON PODKAMINER

Summary

- Properly defined monetary policy may have to, occasionally, subordinate low inflation to other concerns (including the need to preserve financial stability).
- Since August 2007 the Eurosystem's actual policy has evidently been better than 'their' words. The ECB has suddenly become indifferent to high and rising inflation, while the major national central banks of the Eurosystem have been supplying their private banking systems with large additional portions of liquidity (also at longer-term maturities).
- The gaps between words and deeds, though evident, will probably be inconsequential for the ECB's credibility in the longer run. But there is some room for a better (more frank) communication.
- Appreciation is generally lacking of the dismal risks for price stability ensuing unattended financial crises. Preventing financial collapse may enhance the risk of higher inflation – but at the same time it can reduce the risk of a major deflation. And deflation is likely to be much more devastating than inflation.
- Openness, promptness and decisiveness are perhaps the best principles for communicating failures of major banks/financial institutions to the public.

The Reference

'... once the [ECB] Governing Council has defined the monetary policy stance necessary for maintaining price stability in the medium term, in line with its mandate as defined by the Treaty, the ECB has the responsibility to also ensure the smooth functioning of the segment of the money market that we influence. I should like to underline – once again – that these two responsibilities are clearly distinct and should not be mixed.'

President Trichet, Monetary Dialogue, December 2007

Properly Defined Monetary Policy May, *Occasionally*, Have to Subordinate Low Inflation to Other Concerns

A properly defined policy stance necessary for maintaining price stability in the medium term may – *under normal circumstances* – fully abstract from the central bank's other responsibilities, including its responsibility for ensuring a properly smooth functioning of the segments of the money markets under its direct influence. Under *normal circumstances* (understood as an absence of mounting threats to the stability of the entire financial system) the central bank can safely concentrate on its more narrow business of attempting to control consumer goods inflation (and eventually also on contributing directly/indirectly to a possibly high level of utilization of the existing output potential).

Of course, non-normal circumstances (i.e. the ones characterized by the emergence of grave threats to the overall financial stability) have been occurring relatively infrequently. In actual fact the euro area has been spared – until quite recently – any potentially disruptive financial instability altogether. This tranquillity may have given rise to the opinion that the concerns over the ‘*smooth functioning of the segments of the money market that we influence*’ are nowadays *always* at most secondary.²²

To my mind, this opinion is fatally mistaken. The smooth functioning of the segments of the money market that *they* influence may turn out to be essential for preventing the overall collapse of the financial system²³ – which is usually followed by *truly* nasty real developments. Moreover, there is no doubt – in my mind – that confronted with the prospects of a financial crisis of major proportions (say, on the scale reminiscent of the one experienced in Japan at the end of the 1980s) even the Eurosystem’s bosses would: (1) give preference to actions supporting the smooth functioning of the money market; (2) not object to other actions even if these seemed to be enhancing the risks to price stability proper.

The Eurosystem’s Actual Policy Evidently Better Than ‘Their’ Words

Indeed, the actions, both *not taken* and *taken*, by the Eurosystem since the onset of the crisis (August 2007) have spoken a language distinctly different from that of the ECB high representatives.

First, despite the adverse ‘supply shocks’ hitting the European economy (e.g. in the form of rocketing prices of imported energy carriers and other raw materials) and a fast rise in the euro area consumer price inflation in the second half of 2007, the ECB has kept its interest rates frozen. There can be no reasonable doubt that this sudden indifference to the present levels of inflation has been motivated by concerns over the possible effects, other than inflation, of the ongoing financial crisis.²⁴

²² In the currently dominant schools of monetary policy ‘science’, there is virtually no place for even secondary concerns over the smooth functioning of the money (or any other) market. This may have helped, however marginally, to support the claim about (low) inflation as the primary (if not the only) goal ultimately worthy of being pursued by a ‘modern’ central bank. It is very unfortunate that (some) central bankers should feel compelled to apologize for their actions undertaken to strengthen financial stability. The irony of all this is that central banking itself arose in response to the need to safeguard just that stability – with no mandate whatsoever to influence inflation.

²³ I find it striking that the quote above stresses the limits to responsibilities of the ECB (*‘the segment of the money market that WE influence’*.) But what about other segments? And capital markets in general? Does it mean that the ECB would passively watch e.g. a spreading turmoil in the inter-bank market, or series of major *insolvencies* in the banking sector (or in some other segment of the financial sector)? Even if this is the Letter of the ECB/Eurosystem Statutes, one would have a right to expect some actions – if not by ECB - then from the national central banks of the Eurosystem.

²⁴ Prior to August 2007, inflation had been low and stable, at levels below the sacramental 2% (actually 1.9% in each of the first three quarters of 2007). To the ECB this did not look low enough. That was why the ECB twice raised its interest rates by 25 basis points (in March and June). Strangely, the sudden acceleration of inflation since August 2007 (bringing inflation in the fourth quarter to 2.9%, followed by 3.2% in January 2008) has so far (end-February) elicited no response from the ECB – other than the declarations of continued preoccupation with inflation.

Second, the Eurosystem's major central banks (certainly Deutsche Bundesbank and Banque de France, possibly also others) swiftly engaged themselves into injecting gigantic amounts of money into their national banking system(s).²⁵ Observe that these actions have obviously gone beyond securing a proper functioning of the overnight money market as unusually large portions of liquidity injected are of longer-term maturity. Arguably, preventing the overall illiquidity of the financial sector must have been combined with preventing the bankruptcy of some banks which may have become *insolvent* rather than temporarily *illiquid*. Some NCBs of the Eurosystem are exercising their prerogatives as *Lenders of Last Resort* (to some of 'their' private banks).

Be that as it may, what counts is that there is no doubt that expanding lending to banks is likely to add to growth (or prevent contraction) in the money supply aggregate M3. But this acts against the ECB's famous monetary pillar of price stability. Remember that it is still maintained at the ECB that an expansion of M3 at a rate faster than 4.5% p.a. is '*pointing to upside risks to price stability over the medium run*'. Currently available data (for December 2007) show M3 still rising steadily, at over 11% p.a. Arguably, without all that liquidity pumped into the Eurosystem's banks, M3 may have grown at less impressive rates – hence reducing the *upside risks to price stability*. The indisputable fact that by 'authorizing' the extraordinary liquidity-provision operations the ECB has recently been acting *against* one of (its own) pillars of price stability proves that price stability is not, *right now*, all that important even to them.

Gaps Between Words and Deeds: Probably Inconsequential for Credibility

I believe that the so-called informed public is well aware of the yawning gaps between ECB talk (i.e. the stubborn insistence that price stability remains the overriding goal, and moreover that they remain as 'vigilant' as ever) and the actual policy which is currently guided by obviously different imperatives.

A relevant question to ask here is whether this will not erode the credibility of the ECB in the longer run. Of course nobody can tell the answer. Psychology should perhaps be consulted here. In so far as psychology finds ample evidence of cognitive dissonance, mass lunacy²⁶ etc. permeating social life, the answer may be negative: credibility need not suffer. Perhaps the so-called informed public finds the words inconsistent with actions somehow reassuring.

²⁵ Contrary to the popular opinion, the liquidity has *not* been provided by the ECB itself. The liquidity provision is carried out, through refinancing operations, by the national central banks (NCBs) of the Eurosystem. The ECB seems to be playing a passive role in all this, 'authorizing' the NCBs to conduct money market operations, or setting quantitative limits to specific operations. Of course, given the fact that the Presidents of the NCBs do sit on the ECB Governing Council, one should not expect any substantial disagreements between the major NCBs and the ECB over 'authorization' of the actions of the former. The principle underlying the implementation of ECB policy is strongly national also because a euro area financial institution may have access to the Eurosystem's facilities/money tenders *exclusively* through the *national* central bank of the Member State in which it is established.

²⁶ After all the current crisis itself is the product of a delirium that afflicted masses of the well-informed and financially clever (but perhaps not the cleverest) individuals on both sides of the Atlantic. (The best informed and the cleverest made fortunes on the colossal Ponzi scheme which resides at the core of the crisis.)

Myself, I would (perhaps naively) recommend a frank statement to the effect that dealing with a *force majeure* (here in the form of an impending financial crisis of possibly large proportions) must *temporarily* be given precedence over inflationary concerns – and that as soon as the danger is over the normal business of primarily controlling inflation will be resumed.

Moreover, I would make clear that an unchecked financial crisis can cause price instability of a *different* kind. That instability – namely *deflation* – can potentially be even more devastating than inflation. Actions that enhance the risk of higher inflation may (and should) therefore be justified by reference to the ‘price stability’ imperative. Namely, by pointing out to the fact that such actions are taken to minimize the risk of deflation.

An Aside: ‘Bad Deflation’ as a Likely Consequence of a Financial Crisis

A financial crisis originating in one specific market segment, if unchecked in time, could precipitate a wave of illiquidity/insolvency spreading fast throughout the *whole* financial system. Further, the process is likely to involve: (i) a general fall in prices of financial assets; (ii) increased preference for holding liquidity (cash); (iii) disruption of normal payments and elementary financial intermediation (also shortage of credit needed even for financing working capital in the real sectors of the economy).

These developments could be associated with *falling* prices of goods produced domestically, due to the emergence of production/employment slacks in the real sectors. Losses suffered by individuals on the financial markets reduce their wealth – and this is also believed to be reducing the demand for consumption goods and services additionally. Losses suffered by firms reduce the size of planned fixed investment. Banks (and debtors) suffer if only because with falling prices servicing the real debt burden is magnified. Real investment tends to plummet – also on account of shortage of credit, the expectation of goods' deflation and high real interest rates (a likely consequence of deflation).

All in all, an unchecked financial crisis has the potential for playing havoc to the real economy. It creates conditions conducive to a 'bad deflation', with falling prices of both goods and financial assets – all accompanied by a recession. Needless to say, deflation-*cum*-recession would then be reinforcing the financial crisis.

A bad deflation makes the monetary policy largely ineffective (or at least difficult to conduct) because even when *nominal* interest rates are zero, the *real* interest rates are – under deflation – still positive (and possibly quite high). For the appreciation of the destructive effects of a bad deflation following a financial crisis, one does not have to be reminded of the Great Depression of the 1930s. It is sufficient to reflect on Japan's unimpressive (to say the least) real performance for close to 20 years by now.²⁷

Openness & Decisiveness the Best Policy

‘How to deal with communication in a situation of bankruptcy of a major single case of euro area financial institution in a way that does not generate outright panic?’

I assume that openness and promptness of communication are the best principles if only because the facts are bound to leak out anyway. Worse still, the leaked information may well be imprecise or grossly distorted, giving rise to rumours based on half-truths.

²⁷ Observe that Japan's deflation has – even now – been refusing to go away for good despite consistently large fiscal deficits, a weakening currency (essentially shadowing the US dollar) and unique dependence on imports of energy and other raw materials whose prices have been skyrocketing.

These may provoke more ‘panic’ than the actual facts would have done. Secondly, the credibility of the authorities caught hiding ‘corpses’ will suffer. This will add to the general erosion of public confidence in official statements on the soundness of this or that financial institution, even when these statements happen to be based on truth.

The second principle worth recommending is decisiveness in dealing with a failing institution. Quick and comprehensive *final* decisions should be made – and announced. I guess it is not sufficient to announce the creation of a *committee* entrusted with working out a specific solution at some unspecified *later* date.

PRICE STABILITY AND THE LENDER OF LAST RESORT

Briefing Paper for the Monetary Dialogue of March 2008 by the Committee on Economic and Monetary Affairs of the European Parliament with the President of the European Central Bank

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Executive Summary

- A monetary policy committee's role in financial market regulation should be limited. Allowing a monetary policy committee to engage in overtly political activities threatens its independence.
- When most external financing was provided by banks, central banks could promote the stability of the financial system by acting as a *lender of last resort* in a financial crisis: lending freely, at a penalty rate, against collateral that would have been good in normal times. Now that external financing is increasingly acquired by issuing tradable financial instruments, central banks can promote the stability of the financial system by acting as the *market maker of last resort* in a liquidity crisis. They can either buy or sell securities that have stopped trading or accept a wider range of collateral in repos and for collateralised loans and discount window borrowing.
- The immediate central bank response to the current crisis was to provide large amounts of liquidity against high-quality collateral, thus providing additional liquidity to institutions that did not need it and potentially sowing the seeds of future crises.
- With a better system of depositor insurance there is no reason to bail out institutions, such as Northern Rock, that are of no systemic importance. The decision that a particular institution is too important to fail is too political to be left to the unelected officials of an independent central bank.
- It is not obvious how central bank communication can avert bank runs. Central bank announcements are unlikely to be believed if the central bank has an incentive to claim that things are better than they are, and if they are believed they may cause a run.

Price Stability and the lender of last resort: separation of responsibilities

The primary role for a central bank is the provision of a stable means of payments. This entails maintaining price stability and promoting a sound financial system. Monetary policy requires expertise and politicians may be tempted to use monetary policy opportunistically, thus, society should delegate monetary policy making to an independent body of experts charged with pursuing an inflation target. It is palatable, in a democracy, for unelected officials to carry out such an important task because inflation targeting is a technical task. If a central bank is also asked to carry out political tasks, then its independence becomes less appealing. This suggests that safeguarding a central bank's independence may require limiting its ability to intervene in the financial sector. In this note, I discuss how central banks should respond to this and other financial crises. I evaluate central banks' immediate response to the crises. I suggest appropriate reactions to a "Northern Rock" scenario. I also touch on an important related topic: the role of the central bank in providing information to the private sector during a period of financial unrest.

The central bank should be the market maker of last resort

At one time commercial banks were the main providers of credit. The main liabilities of commercial banks were deposits that could be withdrawn on demand on a first-come-first-served basis. The main assets were illiquid loans. This balance sheet structure ensured the possibility of bank runs and a credit crunch, even when banks were fundamentally sound. Normally, each depositor believed that other depositors would not withdraw their money and so no depositor had an incentive to frantically withdraw their own. But, exceptionally, each depositor believed that the other depositors were about to withdraw their funds. Thus, it was optimal for each depositor to scramble to get his money out before the bank's liquidity was exhausted. As central bank independence was not then an issue, the central bank's role in supporting the financial system in such periods of turmoil was clear. It was to follow Walter Bagehot's advice and be the *lender of last resort*, supporting the banking system by lending freely, at a penalty rate and against collateral that would be good in normal times, even if it was currently damaged by the unrest.

Times have changed, however. When financial and non-financial companies decide to acquire external financing they are now increasingly likely to issue tradable financial instruments, rather than to borrow from banks. A liquidity crunch occurs when the market for some of these tradable instruments seizes up; trade in the assets comes to a near or complete halt. As a consequence, these assets are no longer priced and are not acceptable as collateral. As a result of the cessation of trade, financial and non-financial institutions' borrowing needs increase and their ability to borrow declines.

The current financial crisis is an example of a liquidity crisis and it arose in the following way. Banks, disliking bank runs and wanting to increase the turnover on their balance sheets (thus generating more fee income), did not want to hold illiquid assets. Thus in the 1980s they began to sell their previously illiquid assets to off-balance sheet entities that mixed them with other assets and issued tranching securities against the resulting asset pool. In some cases these tranching securities were then purchased by other entities that mixed them with other assets and sold tranching securities against this new asset pool. While the pooling reduced risk, it also destroyed information; no one really knew much about the riskiness of one of these sliced and diced multi-layered assets. When an optimistic mood prevailed, these assets remained liquid. However, when fear became the prevailing emotion this market became illiquid: as the riskiness of these assets was and is nearly impossible to calculate, these assets could and cannot be disposed of at a price that was anywhere near what is probably their fundamental value.

As it was difficult to assess a financial or non-financial firm's exposure to these collateralised securities, counterparty risk became important in the interbank market. No one knew – or knows – where all of the bodies are buried.

Financial markets are a public good, and when they fail the central bank should intervene by playing the role of market maker of last resort.²⁸ An obvious way to do this is for the central bank to price the securities itself and then to accept them as collateral in its repurchase operations and against its collateralised loans and discount window borrowing – extracting an appropriate penalty, of course so as to minimise moral hazard problems. If markets are illiquid at, say, three months, then the central bank should conduct operations at this maturity. The ECB already accepts a wide range of securities as collateral, although there are restrictions. In particular, they accept nothing rated lower than A-. The ECB's Governing Council, however, is empowered to change the list of eligible counterparties and instruments any time.

The above suggestion may sound a bit like belling the cat. If there is no market price, how does the central bank know what the price should be? The honest answer is that it is not easy. Central bank banks will have to recruit staff with expertise in quantitative mainstream finance and financial engineering, as well as market microstructure. They will have to work closely with ratings agencies.²⁹ It may also be possible to have auctions that serve as price discovery mechanisms.

This section has been concerned with what central banks should do in a liquidity crisis, but it is worth saying something about what they should not do. They should not cut interest rates unless they believe that the crisis will have such a significant effect on real activity that inflation will fall without such a cut. If this is not the case and they attempt to solve a liquidity crisis by lowering their target interest rate, they may save a few financial institutions but they may also effectively signal to the markets that they are concerned about the situation and they may lose credibility for being tough on inflation.

How have central banks managed liquidity crises?

The Federal Reserve initially responded to current crisis by cutting the primary discount rate from 6.25 to 5.75 percent on 17 August. The discount rate is the rate the Fed charges eligible financial institutions for borrowing at the discount window. The problem, however, was not that banks could not pay 6.25 and stay in business, but that they did not possess the eligible collateral. Thus, this action was not helpful; it merely transferred money from the tax payer to banks that possessed eligible collateral. Instead, the Fed should have expanded the set of eligible collateral. In addition, it should have removed the stigma attached to discount window borrowing and increased the pool of eligible borrowers. For historical reasons, discount window borrowing is primarily restricted to commercial banks at the Fed and at many other central banks. Now that non-financial institutions have taken away much of banks' business there is no reason for this restriction. And, as it is preferential it adds an element of the political to this central bank role.

²⁸ See Buiter, Willem and Anne Sibert (13 Aug 2007), "The Central Bank as the Market Maker of Last Resort: From Lender of Last Resort to Market Maker of Last Resort," VOX, <http://www.voxeu.org>

²⁹ The rating agencies must be reformed. The raters were paid by the issuers of the products they were rating and would often advise those whose They often advised those whose financial products they would rate on how to engineer the product to get the best rating!

The ECB injected large amounts of liquidity into markets in mid August when the overnight interbank rate threatened to rise sharply. The Fed acted similarly. This was not productive. Even though the ECB accepts a wide range of collateral, it only accepts collateral of good quality. Thus, the ECB merely provided a large amount of liquidity to the institutions that did *not* need it, sowing the seeds for later liquidity crises.

What should the central bank do when face with a 'Northern Rock' scenario

The decision to bail out an individual bank is far too political an act for the unelected officials of an operationally independent central bank. It should be left to a separate regulatory agency, which has the expertise, and to the Treasury, which has the power to tax. All that is needed is that the regulators have a credit line with the central bank (or the ECB in Euroland) that is guaranteed by the Treasury.³⁰ Bailouts should only occur when the collapse of an institution threatens the financial system. Regulators should not have felt compelled to bail out an institution the size of Northern Rock. As the UK's fifth largest no mortgage lender, its demise would have been of no systemic importance.

The rationale for bailing out an institution such as Northern Rock is that it is unfair for depositors to lose their money simply because the managers of the institution followed an overly risky strategy. It is unreasonable to expect depositors to monitor that management. There should however, have been in place, a mechanism that would protect depositors and discourage managers from excessive risk taking. There are two obvious such mechanisms. The first is deposit insurance for institutions that agree to abide by regulations and to be supervised. Unfortunately, such deposit insurance in the United Kingdom is inadequate, as it is in much of Euroland. The second mechanism would be to allow the regulators to take over the failing institution and fire all of the managers. It should be noted, of course, that there is no rationale for bailing out the shareholders of a failing financial institution. Poverty resulting from poor investments is no more deserving of alleviation than poverty caused by many other factors and existing government programmes for poverty relief can be employed.

The role of central bank communication

Can appropriate announcements by the central bank stave off a bank run? The markets did not believe Chancellor of the Exchequer Norman Lamont's assurances that in 1992 that there was not a "scintilla of doubt about the pound" and they ignored Fed Chairman Alan Greenspan's 1996 warnings about "irrational exuberance". As long as central bankers have an incentive to make things sound better or worse than they really are, it appears that they are unlikely to be believed. In general, announcements are a poor way to signal information. This is because -- to be effective -- a signal must be costly and "talk is cheap".

Suppose, however, that a central bank could credibly convey some information. What effect would this have on a bank? A bank run, such as the one on Northern Rock, is a classic example of a *coordination failure*. A coordination failure is a bad equilibrium in a scenario where there are multiple possible equilibria. To see that there are multiple outcomes, suppose that a bank is fundamentally sound, as Northern Rock probably was. If each depositor believes that all other depositors are going to keep their money in the bank, then it is optimal for each depositor to keep his money in the bank. There is not bank run. However, if each depositor believes that all other depositors will withdraw their money, then it is optimal for each investor to withdraw his money. There is a bank run. These equilibria satisfy the desirable property that each investor is acting optimally, given the behaviour of the other investors.

³⁰ Apportioning responsibility may present some complications in Euroland.

The equilibria have the undesirable property, however, that it is hard to explain why they occurred. What causes the depositors to coordinate on a particular outcome? In the canonical story of the bank run, depositors have no information about bank's solvency and they have no way to predict what other depositors will do. They have nothing on which to base their decision to withdraw their money or not. Suppose instead that there are many depositors who each have some independent idiosyncratic private information.³¹ Then, each depositor has some information on which to base his decision, but has no other information that helps to predict what others will do. So he acts on the basis of his own information. Thus, if the bank is able to withstand a large enough run – even though it could not withstand all depositors demanding their money – there is no run. A large enough fraction of depositors will receive information suggesting that the bank can withstand a sizable attack and, basing their decision solely on this, they choose not to attack.

Now suppose that the central bank can credibly convey information about the central bank. This information is of good quality relative to the private information and it is common knowledge: everyone sees it, everyone knows that everyone else sees it, everyone knows that everyone knows that everyone sees it and so on. In this case a bank run again becomes a possibility.³² This is because depositors no longer place enough weight on their own information. Instead, they base their decision primarily on what they believe others will do. If they believe others will withdraw their deposits, then it is optimal for them to withdraw their deposits as well.

The message of this section is that it can be difficult for central banks to convey information if they public believes that they have incentive to mispresent things. And, even if they can convey information, for the particular case of bank runs, it is not obvious that doing so improves matters.

³¹ To be precise, I assume that there are is a continuum of depositors.

³² Hellwig, C. (2002), "Public Information, Private Information, and the Multiplicity of Equilibria in Coordination Games," *Journal of Economic Theory*, 107, pp. 191-222.

**MONETARY POLICY AND THE ‘LENDER OF LAST RESORT’ FUNCTION OF
A CENTRAL BANK**

**Briefing Paper for the Monetary Dialogue of March 2008 by the Committee on
Economic and Monetary Affairs of the European Parliament with the President of the
European Central Bank**

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In times of trouble, especially in the case of a liquidity crisis, commercial banks may need extraordinary lending by the central bank. This is one of the traditional roles central banks have played since the middle of the 19th century. As a ‘bankers’ bank’, a central bank was and still is a financial institution that provides both regular and extraordinary credit to commercial banks and other financial institutions. As Dr. Goodhart’s (1988) has said, a central bank is in fact the head of a “club” of financial institutions, in as far as it provides with liquidity the group of banks it supervises.

This in the first place means that the central bank, as the reference institution of such a club, is responsible for providing a sound monetary standard to the members. The object is that the rest of financial institutions adopt it as a reference of value when issuing their own means of payment - under a fractional reserve system, issuing different kinds of bank deposits. This it used to do by tying its currency to gold or silver. Nowadays, the provision of a sound monetary standard is achieved by conducting a monetary policy that aims for price stability in the mid and long term.

Secondly, the central bank traditionally was the keeper of the metallic reserves of its club of banks, which could access such reserves when needed. Today this means that it will regularly supply liquidity in the form of high-powered money.

Thirdly, the central bank will provide some standard financial services to its commercial banks. Such services include inter-bank settlement, deposit and regular overdraft facilities and, if needed, extraordinary credit in difficult times as the ‘lender of last resort’ (LOLR). The counterpart for these facilities is the supervision and regulation of the financial market, as an assurance that there will be no free-riders in the club.

The focus of this Report is whether the provision of a sound and stable monetary standard and the supply of regular and extraordinary credit can be conceived and analysed independently of each other even if they are closely related. It is our contention that the LOLR function, by which the central bank is ready to provide extraordinary credit in the very short run to temporarily illiquid banks; and the sound money function, which aims at maintaining the purchasing power of the currency in the mid and long term: should be in principle separated and in fact separately executed.

The financial principles of a sound money policy and of a self-standing LOLR function

Sound money. - Commercial banks will use the monetary standard provided by the central bank to issue their own means of payment only if it has a consistent and credible reference of value. The more stable and predictable the value of the currency, the greater will be the demand for it as a means of payment in the market at large, either in the form of coins and notes (known as “legal money” or “high powered money”), or in the form of bank deposits (known as “bank money”). A stable currency will be widely used, which will increase the central bank’s profit. This is the seigniorage, obtained from the difference between the inflation corrected face value of the money in the economy, and the cost of producing that money, be it made up of coins, bills or book entries. Since this cost today is negligible, the seigniorage of the central bank will be directly correlated with the real demand for cash balances, itself a stable proportion of real income. Consequently, seigniorage will increase with the real growth rate, to which an adequate supply of sound money contributes significantly.

Lender of Last Resort. - The LOLR function should in principle be run according to the following guidelines (see Schwartz and Castañeda, 2007 for a more detailed explanation):

- Since financial turmoil may result in a credit crunch in the economy, as the one we are witnessing today, the central bank should see as its duty to restore calm in the money markets by providing the needed credit.
- The collateral that an illiquid bank should provide as a security for the extraordinary credit thus supplied can be widened in times of need but the value for discount of less reliable paper should be reduced by applying a ‘haircut’ to it.
- The central bank should provide extraordinary lending only for the very short run. Once the crisis is over and the confidence in the banking system fully recovered, the assisted bank should pay back that credit. The extra liquidity provided to the market should not stoke inflation by permanently increasing the aggregate monetary supply.
- Such extraordinary credit must be provided at a penalty rate. The higher rate should be a disincentive for imprudent behaviour in the future. In this way, the central bank will develop a time consistent policy that eschews moral hazard.

Unconditional financial assistance to insolvent banks harms the credibility of an autonomous and independent price-stability-driven monetary policy. Furthermore, it deprives commercial banks of any incentive to avoid risky policies in the future, since they can always rely on the financial support of the central bank. In such a framework, this provision of extraordinary credit to the commercial banks will result in an subordinate, inconsistent and inflationary-biased monetary policy. Following the above principles helps maintain a smooth payment system, without weakening the monetary policy aimed at price stability. These are strong arguments in favour of keeping both functions clearly separated.

Analysis of the last extraordinary intervention of the ECB in the money market in December 2007

The supplementary demand for liquidity by money markets participants during the last quarter of 2007 resulting from the sub-prime crisis in the U.S. during the summer became acute at the year end, when financial institutions close their balance sheets and must be seen to meet their reserve requirements. This led to a massive intervention by the ECB in December 2007, in its role as LOLR

At that time, short term money market rates (see one month Euribor, Chart 1) were subject to very high volatility and were much higher than the official nominal interest rate of the ECB (that is, the nominal rate corresponding to the minimum bid rate in the main refinancing operations). This gap between the official nominal rate and the money market rates indicated an extraordinary shortage of money in the markets and an undesirable liquidity pressure on the banking sector in the very short run. The ECB addressed that gap at the end of last year by providing a significant amount of credit³³ to the financial institutions at a 4.21% rate; which was “*the weighted average rate of the previous main refinancing operation one week before*” (Trichet 2007). After this active intervention in the money market, short-term interest rates were brought back more or less in line with the ECB official nominal interest rate, thus restoring the smooth running of the payment system for the time being (see Chart 1).

This intervention in the money markets followed sound financial principles, as set out in the previous section:

- First, as the President of the ECB remarked at that time³⁴, the extraordinary credit was provided against good or solid collateral.
- Secondly, the ECB provided this extraordinary credit at a nominal rate (4.21%) slightly higher than the official rate (which is the minimum bid rate of the main refinancing operations, 4%). True, charging a penalty rate would have required the providing at the ECB standard marginal lending facility (5%). But by providing extraordinary credit without lowering the official nominal rate or the marginal lending facility rate, the ECB behaved more prudently than the Federal Reserve.
- Finally, this very short run extraordinary credit provided to solvent banks did not increase the aggregate money supply. In order to tidy money markets over the year end period and thus prevent the contagion of well run and solid banks, the ECB extended the normal maturity of its lending to 16 days instead of 7. Moreover, as Gonzalez-Páramo (2008) recently remarked, this extraordinary lending did not increase the total or aggregate money supply and did not affect monetary policy targets. To do so, the ECB reduced the amount of credit provided one week later (28th December) as part of its main refinancing operations (assigning €20.000 millions instead of the normal €160.000).

In sum, the December 2007 intervention of the ECB in the money markets, aiming to keep the short term money market rates in line with the ECB main rate, was kept clearly apart from the conduct of the bank’s monetary policy.

Did the ECB recent intervention as the LOLR affect the running of the monetary policy?

Market participants and market analyst seem to have misunderstood this policy and interpreted it as a change of the ECB monetary policy towards a more expansionary policy stance. Money markets were suffering from an acute liquidity shortage, as indicated by market rates well above the official nominal rate. The intervention of the ECB reduced that gap. As the President of the ECB clearly explained in the quarterly hearing at the European Parliament (December 2007), this type of intervention in the money market must be seen as an extraordinary financial assistance in difficult times. It should not be seen as the sign of a more accommodative monetary policy in the euro area.

³³ The ECB injected 218,500 (Euro millions) in the 12th of December, followed by 348,000 more one week later (19th December).

³⁴ “Let me also underline that we only provide such operations against solid collateral, as always.” (Trichet, 2007).

The public statements of several ECB Executive Board members³⁵, reinforced the view that the ECB Directorate separates the provision of extraordinary credit and the running of a credible price monetary policy, as they respond to different policy targets and require different tools:

- Acting as the LOLR, the central bank may assist financial institutions in case of a shortage of liquidity in order to: (1) restore the money market equilibrium in line with the central bank official nominal interest; and (2) prevent the possible failure of solid and sound financial institutions as a consequence of market overreaction.
- Acting as in charge of monetary policy, the central bank uses regular auctions and provides credit to the financial institutions with the aim of achieving price stability in the euro area in the mid and long term.

These two roles should not be confused. Both are needed in order to keep a functioning money market and payments system, while maintaining the purchasing power of the euro.

However, even though this policy framework has been clearly communicated to the markets by the ECB, its refusal to *raise* its official interest rate to counteract the spread of inflationary expectations may have caused some confusion. In particular, according to both the information provided by the ECB itself, there has been in the last 3-6 months extensive and conclusive evidence that would have supported (and still supports) an increase in the official interest rate in the Euro area. Only the concern, never voiced by ECB officials, that continuous movements of the bank rate can increase the volatility of the money markets would justify keeping it unmoved for long periods.

- In the last months there has been a significant gap between registered inflation and expected inflation, and the ECB definition of price stability, to wit, that the Harmonised Index of Consumer Prices (HICP) grow below, but close to, 2% (ECB, 2003).
- It is true that the ECB has adopted a forward-looking monetary strategy, by which the ECB does not react to deviations of current inflation in relation to the inflation target; but to deviations of expected inflation in relation to the inflation target.
- However, the persistent deviation of current inflation (3.4%) from the inflation target in the last months could be interpreted as an implicit relaxation of the ECB monetary policy target. Moreover, even today inflation expectations in the Euro area remain high and above the ECB target. If this policy is maintained in the future, refusing to increase the official nominal interest rate in the Euro area can be finally interpreted as an attempt to use interest rate policy to counter the recent turmoil in financial markets rather than keeping it separate as an anti-inflation tool. Market members, under the influence of Federal Reserve practice, are only too ready to see the bank rate as an anti-cyclical tool.

Accordingly, should the ECB come to see the present high inflation rate as permanent, it should have to increase interest rates in order to fulfil its primary policy mandate of mid term price stability.

³⁵ The need to separate both functions has been recently stressed by the President of the ECB: “[...] once the Governing Council has defined the monetary policy stance necessary for maintaining price stability in the mid term, in line with its mandate as defined by the Treaty, the ECB has the responsibility to also ensure the smooth functioning of the segment of the money market that we influence. I should like to underline - once again - that these two responsibilities are clearly distinct and should not be mixed.” (Trichet, 2007). Other members of the Executive Board have said as much (González-Páramo, 2008).

President Trichet (2007) has recently declared current excessive inflation to be merely transitory but has warned that the ECB was keeping it under very close attention in case it became permanent. Otherwise, the market may interpret that the ECB has “de facto” subordinated its primary target to providing the market with liquidity, not in fulfilment of its LOLR function. If this policy scenario is confirmed in the near future, the hypothetical non reaction of the ECB would seriously harm its commitment to achieve price stability.

In order to evaluate the need to increase the official interest rate, an analysis of the information given by the two pillars of the ECB strategy should be made. As a mere synthesis of the information provided by these two pillars, we will take the inflationary expectations available at the time previous monetary policy decisions were made during 2007. Consequently, in assessing current monetary policy, we will evaluate whether the last increases of the official rates were adopted in similar (current and expected) price scenarios.

Should the ECB have increased the official interest rate again in 2007?

On March 8th, the ECB increased the official nominal interest rate in the Euro area from 3.5% to 3.75%. The publication of the ECB staff macroeconomic projections (available at the ECB web site) confirmed the expected HICP to be higher for 2008 than for 2007. These projections give useful information on the expected growth of prices in the Euro area and, though not conditional for policy-making, may serve as a reliable indicator of the ECB price expectations. At that time, inflation (1.8%) was still below the target. But aware of the time lags³⁶ associated with monetary-policy, the President of the ECB explained the interest rate increase by referring to those projection at the press conference after the meeting of the Governing Council (available at the ECB web site). He thus reiterated the need to evaluate the ECB decisions within a forward-looking strategy.

A similar price scenario led the ECB to increase the official nominal interest rate on June 6th from 3.75% to 4.00%. Being also prices At that time prices were still rising below target at 1.8% per year. But the *ECB* staff macroeconomic projections confirmed the upward trend of consumer prices in the short and mid term.

However, as from June 2007 the ECB has kept interest rates unchanged. In the meantime, and especially in the last quarter of 2007, consumer prices have risen month by month, up to a 3.2% rate of inflation in February 2008. Thus, far from decreasing after the last two rate hikes, current inflation remains well above the inflation target. If one were to apply the forward-looking strategy as above, this unprecedented rate of inflation (see chart 2) also confirmed by new inflation expectations, should require an increase in the official interest rates.

Taylor rules indicate the need for further rate increases

A simple, even simplistic way of evaluating monetary policy consists in using the so-called ‘Taylor rules’(see Taylor, 1999). These are rules of the thumb that relate the setting of the bank rate with current and expected inflation and with actual and potential output. When inflation shoots up (or is expected to go up) and growth is above its accustomed path, the Taylor rule signals the need for a bank rate hike.³⁷

³⁶ According to standard models, monetary decisions start to affect markets after 3 – 6 months and have their major effect in a 12 – 18 months time horizon.

³⁷ The connection between output growth and inflation is less than evident, since one can have inflation with zero growth, otherwise called ‘stagflation’ but we will not carp about this since many central bankers act as if they believed that an economy growing above its potential must be inflationary.

If we apply the Taylor rule in its different versions to recent monetary decisions, the conclusion is that the ECB should have increased the bank rate again at the end of 2007 and should have not kept it unchanged in March 2008.

There are two main version of the Taylor Rule, one backward-looking, the other forward-looking. We shall use the forward-looking one that traces the ideal value of the bank rate to *expected* inflation and *expected* growth instead of actual inflation and growth (Clarida, Galí and Gertler, 1998).³⁸ To compare observed changes in the ECB official rate with those implied by expected inflation and growth we have used the following equation 1.

$$i_{n,t}^{of} = i_r^* + \Pi^e + \beta_1 \left(\Pi_{t+i} - \Pi^* \right)_t + \beta_2 \left(\dot{Y}_{r,t+j} - \dot{Y}_r^* \right)_t \quad \text{Eq. 1}$$

where $i_{n,t}^{of}$ is the official nominal interest rate at time t , equal to i_r^* the equilibrium real interest rate, Π^e the expected price inflation, β_1 a weight of 1.5 for the difference between price inflation at time $t+I$ and the desired rate of inflation of 2%, β_2 a weight of 0.5 for the difference of the growth of output for the difference of the growth of real output Y at time $t+j$ and average real growth. In essence, this approximation to the determinants of bank rate decisions (the dependent variable on the lhs. of the equation) looks at the nominal equilibrium interest rate ($i_r + \Pi^e = i_{nom}^*$) on the rhs. and prescribes central bank intervention to offset expected inflation and output deviation from their targets. In Chart 3 one can observe how sharply the ECB official rate diverges from the rate implied by a forward-looking Taylor Rule, especially so in 2008.³⁹

Why is the ECB's monetary policy suddenly so timid?

One can understand that in times of turmoil as the present ones, a central banker will want to err on the safe side and not add interest increases to the forces taking an economy into recession. But the thesis of the ECB is that reducing the official interest rate will not alleviate the cash needs of the money markets nor will it a deflation when there is one. At least the ECB Directorate have not reduced the official rate in March 2008 despite the clamour that they should do so to alleviate the liquidity crunch.

Liquidity must be supplied by the LOLR directly in times of great need by discounting commercial paper at the ordinary or the punitive window. The cash thus provided by the central bank must be drained back after a short time so that it does not lead to higher inflation through the quantity theory mechanism.

The official interest rate must be used as the monetary policy instrument to rein in price inflation. Cuts in the short term nominal interest rate are very remotely connected to the real cycle of the economy, except that when they foster inflation, as they did under Greenspan, they may give a temporary fillip to growth. These monetary booms usually end in shallows and miseries.

³⁸ The original "backward looking Taylor rule" (Taylor, 1993), which explains monetary decisions according to the registered deviations of inflation and output from their targets, is also as a useful tool to explain ex post monetary decisions. Since registered inflation and real output data can be used as proxy variables of future inflation and output, it has also been used to explain recent monetary policy, with not too outlandish results, as one can see in Chart 4, where again the official rate should be increased. See also Castañeda (2006) for a revision and critique of this type of monetary reaction functions.

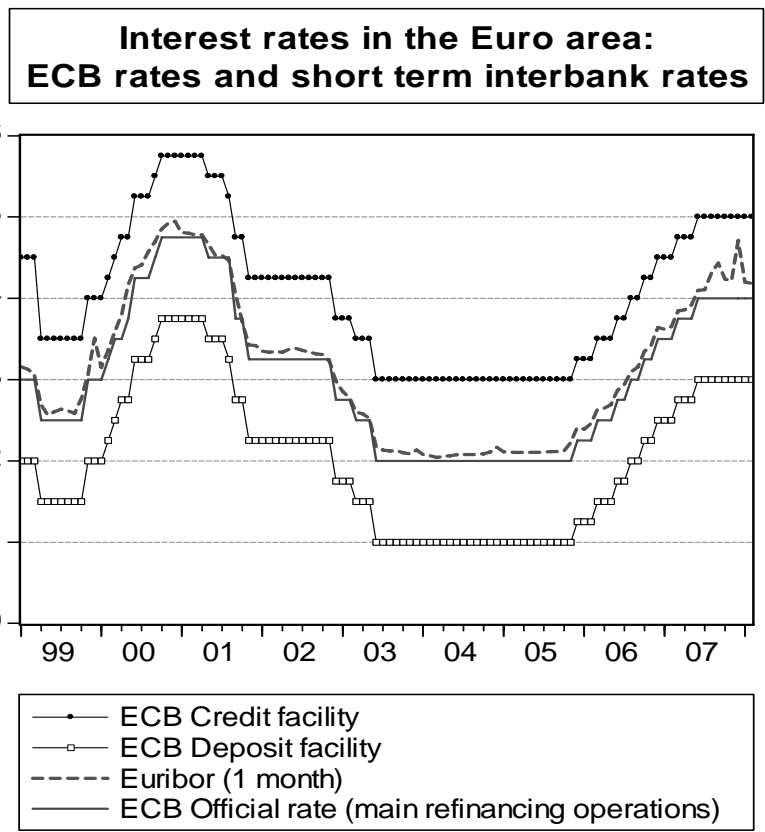
³⁹ As can be seen in chart 4, we have also used a more realistic explanation of recent ECB monetary policy by taking into account the gradualism in monetary policy; that is, the convenience of changing the bank rate in small steps. This smoother pattern of monetary policy explicitly takes into account previous interest rates (smoothing parameter "ρ" = 0.8):

$$i_{n,t}^{of} = \rho \left(i_{n,t-1}^{of} \right) + (1 - \rho) \left[i_r^* + \Pi^e + \beta_1 \left(\Pi_{t+i} - \Pi^* \right)_t + \beta_2 \left(\dot{Y}_{r,t+j} - \dot{Y}_r^* \right)_t \right] \quad \text{Eq. 2}$$

References:

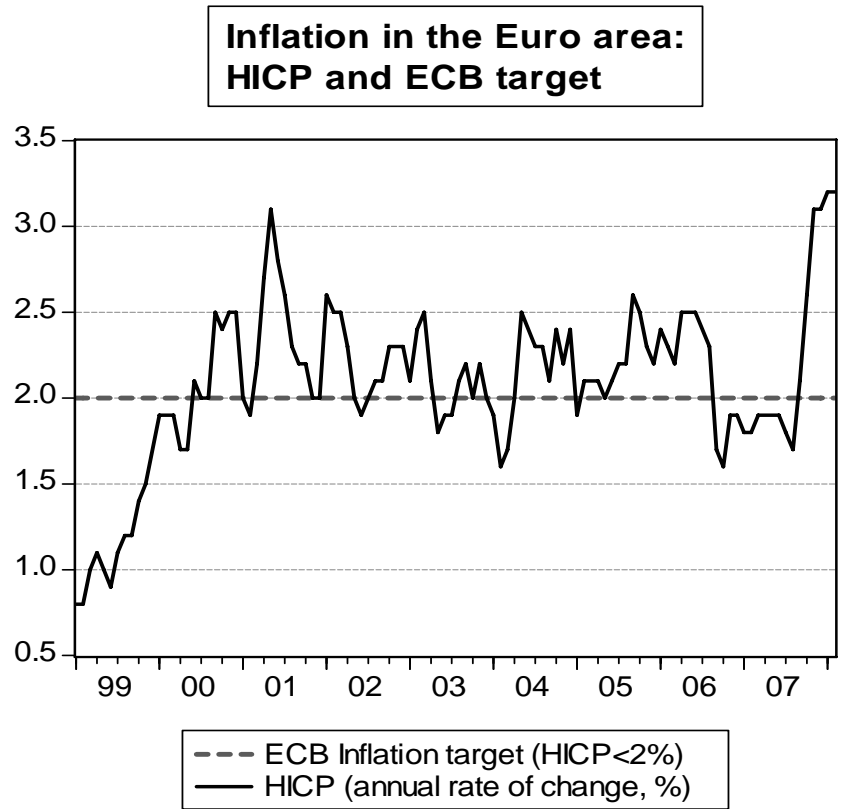
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Chart 1



Source: Data from the ECB and the Bank of Spain.

Chart 2



Source: Data from the ECB and the Bank of Spain.

Chart 3

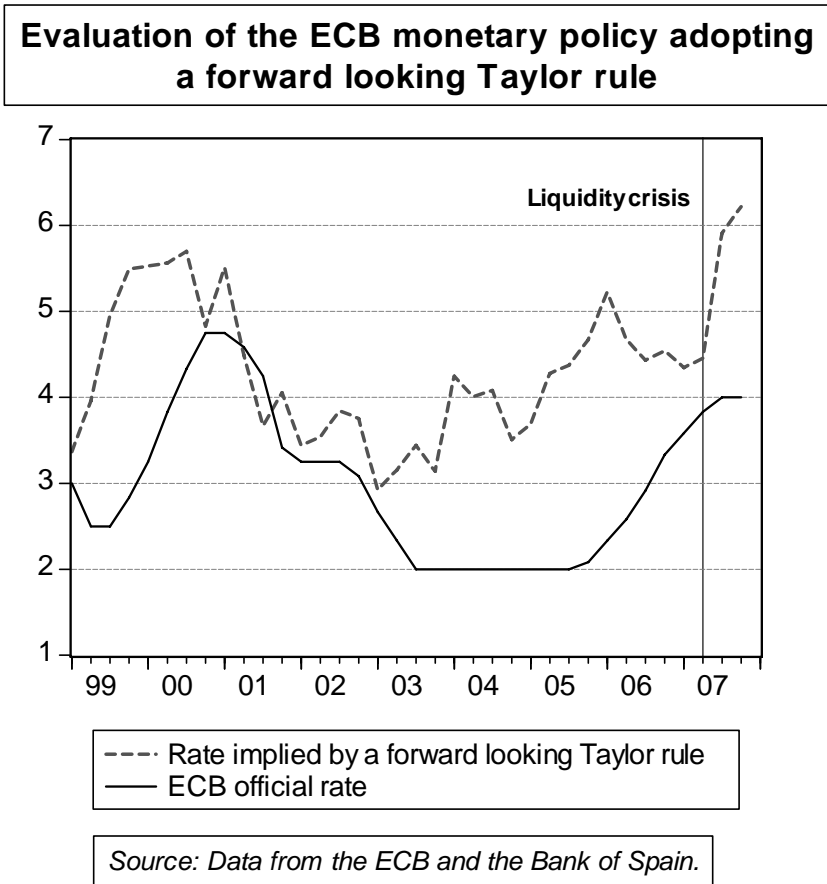
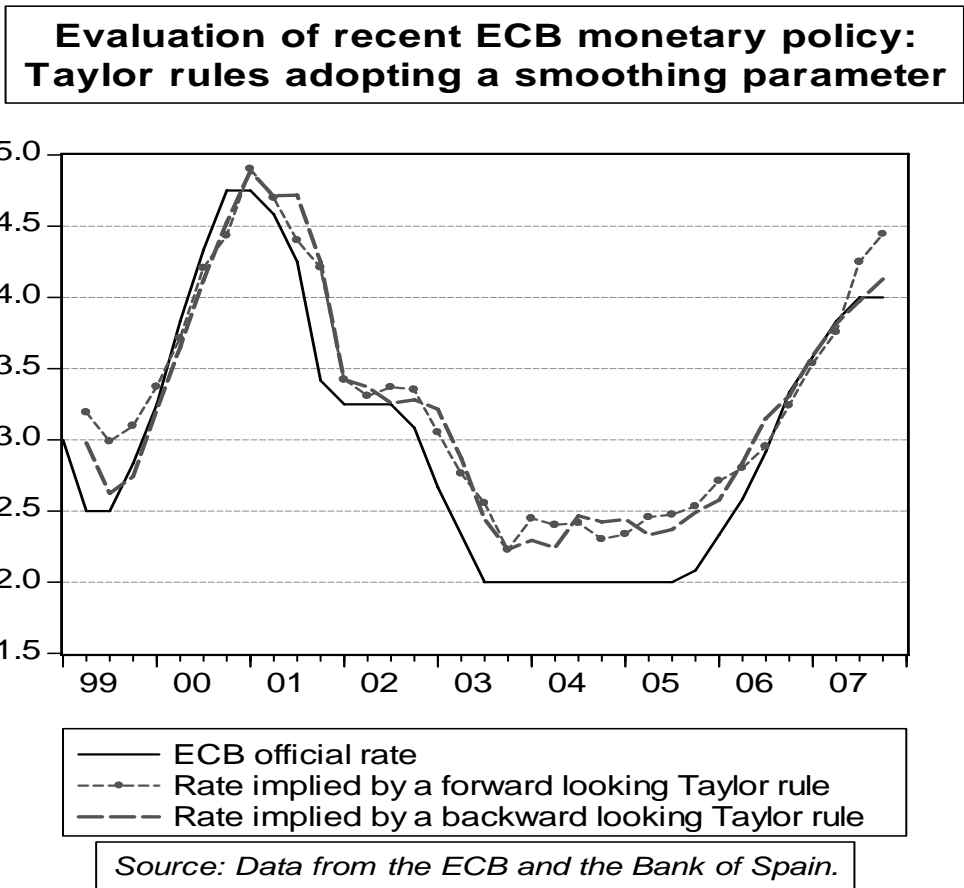


Chart 4



SEPARABILITY OF ECB OBJECTIVES AND TASKS:

PRICE STABILITY VS LENDER OF LAST RESORT

Briefing Paper for the Monetary Dialogue of March 2008 by the Committee on Economic and Monetary Affairs of the European Parliament with the President of the European Central Bank

Norbert Walter

A conflict between the objective of price stability and the lender-of-last-resort function is ruled out ex definitione in the case of the ECB, as the ECB is not mandated to perform the role of a lender of last resort in the strict sense of the word.

The ECB's operations in the money markets and interest decisions do not conflict with the objective of price stability. As forecasts for economic growth have been revised downward since mid-2007, a smaller-than-expected output gap points to less inflation pressure and lower interest rates.

The ECB has not expanded its balance sheet in an unusual way except for a brief period in December 2007. Lending by banks to non-financial corporations continued to expand at strong rates in late 2007 indicating that this market remained open throughout the year.

The provision of emergency liquidity may, in principle, undermine private-sector discipline, which is needed for financial stability. This may in turn may ultimately threaten the ECB's ability to achieve its primary objective, i.e. price stability. However, it is unlikely that the ECB's action will cause substantial moral hazard, as long as the exceptional character of such actions is clear and as long as misbehaviour is effectively sanctioned.

Independently of the discussion on a potential conflict of objectives at the level of the ECB, recent events have highlighted well-known deficiencies in the EU's arrangements for effective crisis management. While the August 2007 Economic and Financial Committee (EFC) report addresses some of the necessary actions, it is unlikely that these will prove sufficient.

Introduction

Conflict between ECB objectives?

When, in the wake of the US subprime crises, liquidity dried up in money markets in the summer of 2007, the ECB provided massive amounts of liquidity outside of its normal monetary policy operations in an effort to keep money markets rates close to official interest rates. As dislocations in money market continued over the remainder of 2007 and into 2008, the ECB, along with other major central banks, continued to provide liquidity to the system. The decisiveness, the professionalism and the speed with which the ECB acted, has been welcomed by market participants and most commentators alike. Nonetheless, as exceptional monetary operations continue, the question is being asked whether these might ultimately stand in contradiction to the ECB's primary objective, i.e. the preservation of price level stability.

A number of different hypotheses have been advanced on why there might be a conflict of interest for the ECB, which may threaten the attainment of its primary objective:

— *Lender of last resort function not a problem*

Hypothesis 1: There is a conflict between the objective of price stability and the lender of last resort function. This hypothesis can clearly be rejected: As the ECB is not mandated to perform the role of a lender of last resort (i.e. to provide liquidity, at a penalty rate, to a solvent, but temporarily illiquid bank), there can, ex definitione, be no conflict of interest.

— *Liquidity provision unlikely to be problem for price stability*

Hypothesis 2: Providing exceptional amounts of liquidity to the system can compromise the objective of price stability. This hypothesis cannot be rejected in principle, but whether or not the primary objective is violated depends on the actual execution of emergency liquidity provision. The operations performed by the ECB have, so far, been structured and executed in a way that is fully compatible with the objective of price stability (i.e. emergency liquidity has been provided, without creating excess liquidity) and we argue that there is little probability of a violation of price stability.

— *Moral hazard can be prevented*

Hypothesis 3: Emergency liquidity operations threaten to undermine the credibility of the ECB and to create moral hazard, which would increase the likelihood of financial instability, which in turn would endanger price stability indirectly and in the long-run. Again, while this hypothesis contains a grain of truth in principle, its relevance depends on a number of assumptions which in our view are unlikely to be satisfied.

1. The ECB is not a lender of last resort strictu sensu

There is a frequent misunderstanding about the difference between, on the one hand, “lender of last resort” operations, as understood sensu strictu, and, on the other hand, the provision of (emergency) liquidity to the system.

ECB is not the lender of last resort

The “lender of last resort” function of a central bank refers to the temporary provision of liquidity at a penalty rate to an **individual** bank which is illiquid, but solvent. In the Eurosystem, this lender of last resort function does **not** reside with the ECB, but with the national central banks. The NCBs decide autonomously whether or not to exercise this function (see “Emergency Liquidity Assistance in the Eurosystem” box p. 3). Given the fact that the provision of liquidity to an individual bank can, in principle, affect the monetary base (viz when the amount forwarded is large and the assistance given over an extensive period of time), the NCBs must inform the Eurosystem about lender of last resort operations. However, considering the size of the monetary base in the euro area – with M1 amounting to some EUR 3.8tr – it is clear that any individual lender of last resort operation will not be sizeable enough so as to endanger monetary stability.⁴⁰

Therefore, it holds true: as the ECB is not endowed with the lender of last resort function, ex definitione there cannot be a conflict of objectives between the ECB’s mandate to preserve price level stability and the lender of last resort function.

As regards the provision of (emergency) liquidity to the overall system, this clearly is a task that can only be performed at ECB level. Whether the provision of liquidity to the system (i.e. to the benefit of all banks in the euro area, rather than just one bank as under the lender of last resort function) is in contradiction to the primary mandate of preserving price level stability is an open issue:

⁴⁰ Quite apart from monetary policy concerns, it may, of course, be asked whether there is a need to align lender of last resort policies by EU central banks on the basis that differences in such policies may cause competitive distortions between banks based in different member states.

Theoretically it may or may not be, depending on (1) whether the operations run counter to the course of monetary policy as warranted by the state of the economy; (2) whether liquidity operations lead to an excessive increase in the money supply and in bank lending, and (3) the credibility of the ECB.

Emergency Liquidity Assistance within the Eurosystem

“Co-ordination mechanisms are primarily called for within the Eurosystem. This is the case for emergency liquidity assistance (ELA), which embraces the support given by central banks in exceptional circumstances and on a case-by-case basis to temporarily illiquid institutions and markets. At the outset, it is necessary to stress that the importance of ELA should not be overemphasised. Central bank support should not be seen as a primary means for ensuring financial stability, since it bears the risk of moral hazard. Preventive measures aimed at fostering the adoption of sound risk management practices on the part of financial institutions, and the effectiveness of prudential regulation and supervision in achieving this goal, are the first line of defence against excessive risk-taking behaviour and financial distress. Furthermore, the provision of ELA has been a very rare event in industrial countries over the past few decades, while other elements of the safety net have gained importance in the management of crises. However, if and when appropriate, the necessary mechanisms to tackle a financial crisis are in place. **The main guiding principle is that the competent NCB takes the decision concerning the provision of ELA to an institution operating in its jurisdiction. This would take place under the responsibility and at the cost of the NCB in question.** Mechanisms ensuring an adequate flow of information are in place in order that any potential liquidity impact can be managed in a manner consistent with the maintenance of the appropriate single monetary policy stance. The agreement on ELA is internal to the Eurosystem and therefore does not affect the existing arrangements between central banks and supervisors at the national level or bilateral and multilateral co-operation among supervisors and between the latter and the Eurosystem. However, their smooth functioning assumes an ability to implement, swiftly and efficiently, co-ordination mechanisms aimed at dealing with the cross-border implications of financial crises and at preventing contagion.”

Source: ECB (2000). Annual Report 1999, p.98.

2. Liquidity provision to the system vs. price stability

The objective of price stability

The primary objective of the Eurosystem is to maintain price stability as laid out in Article 105 (1) in the Treaty establishing the European Community. The ECB has defined price stability as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below, but close to 2% over the medium term.

While this definition is clear and unambiguous, the relationships between inflation and its multiple determinants are far from straightforward. Economic growth, output gaps, money supply growth, currency movements, commodity price changes and other variables are difficult to evaluate and their links to inflation may involve considerable lags of possibly varying duration. The most widely used approach to condense some of these many variables is the Taylor Rule which links the central bank interest rate to inflation and the output gap: higher (expected) inflation and a smaller (expected) output gap lead to higher central bank rates.

ECB rate decisions during the recent turbulence

The ECB's decision not to raise interest rates further after the situation on global financial markets deteriorated in the summer of 2007 is in line with considerations derived from the Taylor rule. First of all, real interest rates had reached a level of 2 ¼% by mid-2007 (chart 1) that could be seen as neutral or close to neutral in the long term given the euro area's trend rate of GDP growth of just below 2%.

The ECB had been aiming at raising interest rates above the neutral level because GDP growth was surprisingly strong during 2007. But the financial upheaval significantly dented growth expectations on both sides of the Atlantic and increased uncertainty about the outlook. Consensus forecasts for US GDP growth in 2008 had been revised down from 2.9% in June 2007 to 2.3% by November and fell further to 1.6% by February 2008. The strengthening of the euro to new record highs contributed to lower growth forecasts in the euro area (chart 2 shows the broad trade-weighted exchange rate indices). Consensus forecasts for euro area 2008 GDP growth fell from 2.3% in June to 2.0% in November and further to 1.6% in February 2008 (chart 3). Therefore, the euro area output gap will not shrink – as forecast in June – but rather widen in 2008.

The jump in current inflation rates has to be seen as a temporary phenomenon driven by external forces (energy and food). The ECB will monitor closely whether this will lead to home-grown price pressures. So far, there are few signs of increasing wage inflation and the accompanying higher unit labour costs. Euro area unit labour costs were up just 1.3% yoy in Q3. While there is likely to be some cyclical rise in ULCs as the economy slows, this should not be a major concern for the central bank. In fact, the bond markets have only marginally raised the implied euro area inflation rate over the past weeks (chart 4).

Conflicts between objectives unlikely at the moment

As of March 2008 there does not appear to be a conflict between ECB actions to ensure liquidity in the money markets and the ECB's primary objective of price stability. A possible linkage would run from the ECB's liquidity injection via bank lending to stronger demand for goods and therefore to consumer prices. This linkage does not appear to be operating at the moment for a number of reasons. First, the ECB's lending operations do not seem to have led to a permanent lengthening of its balance sheet. While its lending to euro area credit institutions clearly expanded at the end of 2007 because of its larger monetary policy operations (chart 5 on the next page), this effect had completely disappeared by the end of January. What the ECB has done is to keep market interest rates close to the minimum bid rate of its main refinancing operations. It has not expanded its balance sheet in an unusual way (unlike the Bank of Japan under its "quantitative easing" policy begun in 2001). Dealing with the money market liquidity issues prevented the economy's financing costs from exceeding those indicated by the Taylor Rule.

Bank lending continues to do fine

Bank lending has also not shown unusual or inflation-fuelling trends following the ECB's actions in the money markets. Overall loans to private euro area residents have been expanding at annual rates of around 11% since early 2006 and were up by 11.1% yoy in December (solid blue lines in charts 6 and 7). The growth rates of loans to consumers and for house purchases have slowed since mid-2006 probably because the residential construction booms in some euro area member states have eased (chart 6).

At the same time, lending to non-financial corporations – the largest component of total bank lending – kept rising at ever stronger rates even after the onset of the financial market turbulence. This may be because companies had to seek alternatives to the corporate bond market and it shows that banks were able to continue to provide the economy with loans even as some financial markets were closed. Lending to other financial intermediaries (a small part of overall lending) expanded rapidly in late 2007. The ECB's actions probably contributed to this favourable outcome. While we cannot fully rule out that these additional loans may some day turn out to be inflationary, the continuous smooth functioning of bank lending rightly had to take first priority. A careful monitoring of lending developments remains important.

A scenario with an ECB loss of credibility

Summing up: Is the provision of emergency liquidity likely to threaten the credibility of the ECB? This note has argued throughout that the ECB's actions during the recent period of financial market challenges were reasonable and did not interfere with the primary objective of price stability. Therefore, the ECB's credibility is not at threat.

However, it is not impossible for a central bank's credibility for maintaining price stability to be damaged. A possible scenario – clearly not a forecast or a likely outcome because it involves the ECB misjudging several issues – might look like this: The world economy recovers surprisingly strongly, commodity prices continue to rise rapidly and euro area companies agree to wage increases of 5% or more. In this scenario, the central bank would have to remain preoccupied with liquidity in the money markets: it does not raise interest rates but expands its balance sheet. Consumers would go on a spending spree and bid up prices across a broad range of products. HICP inflation would then remain at 3% or even higher for an extended period of time. German 10-year government bond yields would surge to 6% (last seen in 1996) as inflation expectations settle above 3%. The ECB's credibility would be damaged. Again: this is a hypothetical scenario to illustrate some of the assumptions and misjudgements that would have to be made as well as the consequences.

3. Emergency liquidity, moral hazard and financial instability

Could the provision of emergency liquidity create moral hazard in the financial industry, thereby threatening, in the medium-term, to undermine the discipline needed for financial stability. And given that it is difficult to preserve price stability in the long-term in the absence of financial stability, would this ultimately threaten the ECB's ability to achieve its primary objective of price stability? Again, while theoretically possible, such a scenario is unlikely for the following reasons:

1. Since price stability ultimately cannot be ensured without financial stability, economic actors will recognise that the ECB may, at times and in an appropriate way, need to provide emergency liquidity in order to reach its ultimate policy objective. As long as economic agents understand that these two policy objectives⁴¹ are not mutually exclusive, appropriate (as discussed in section 2 of this paper) action to provide emergency liquidity will therefore not damage the ECB's credibility.

2. *Financial supervision to prevent moral hazard*

Moral hazard will only be caused when those banks or structures (i.e. products and processes) that were the cause of a financial crisis are not held accountable and are not sanctioned. It is the task of financial supervisors and, if need be, of regulators / legislators to ensure that this sanction is being executed.⁴² This, in turn, highlights the fact that the provision of emergency assistance must always be part of a more comprehensive effort aimed at restoring financial stability, an effort that involves central banks, supervisors, ministries of finance and, if necessary, legislators (see box 2).

3. *Emergency liquidity must remain exceptional*

Moral hazard would be caused if emergency liquidity provision to the system did not remain the exception, but became a recurrent and / or enduring event. Therefore, care must be taken by the ECB to make sure that ECB lending facilities do not become a major source of funding for the banking system. For instance, there have been reports that Spanish banks have securitised pools of mortgage loans with the explicit intention of not selling them into the capital market, but to pledge them to the ECB in exchange for funding.

Access to large, exceptional liquidity facilities should therefore be reduced gradually, once markets recover. It should be noted that this is obviously difficult because recourse to special lending facilities is endogenous to some extent: As long as banks can satisfy their liquidity needs using central bank facilities, they will not raise money in normal markets where costs will be higher. But when no bank taps the market for funding, markets appear to be dysfunctional still, justifying the keeping open of central bank facilities.

Summing up, while, theoretically, there are transmission channels through which the provision of emergency liquidity assistance by the ECB may ultimately compromise the ECB's primary objective, the coming about of such a scenario depends on the materialisation of assumptions which are unlikely to be satisfied.

4. Deficiencies in EU crisis management

Deficiencies in EU arrangements for crisis management

Quite independently of the discussion about the potential impact of emergency liquidity operations on monetary policy objectives, recent events have clearly pointed to deficiencies in the institutional structure of financial supervision in the EU, in general, and crisis management specifically.⁴³

⁴¹ It should be noted, of course, that price level stability is the ultimate policy objective of a central bank, whereas financial stability is merely an intermediate policy objective.

⁴² This was discussed in our briefing of December 2007 already.

⁴³ We have discussed these deficiencies in an earlier submission to ECON in August 2007 already. In addition, it needs pointing out that crisis prevention should obviously be considered the first line of defense. Crisis prevention requires, first and foremost, action by the private sector, including effective risk management,

- When central banks decide to provide emergency liquidity to the system, they need to have as comprehensive information as possible on the financial health of the system as a whole as well as of systemically important banks, in order to determine the appropriate size of intervention as diligently as possible. For the ECB, this assessment is difficult, as, due to the nation-based system of financial supervision, there is no central data warehouse where information about the financial health of systemically important financial institutions and the system as a whole is instantly available. In fact, as a consequence, the ECB reportedly decided to provide an abundance of liquidity in its first emergency operation in August 2007 in order to err on the side of caution.⁴⁴
- Similarly, as financial supervision in the EU is still nation-based, there is an insufficient flow of information and, even more so, little cooperation between financial supervisors in times of market stress. This fragmentation in the structure of financial supervision enhances the risk that disruptions in one market will spill over into other markets.
- The EU has not established coherent processes that would ensure consistent communication by authorities to financial markets and to the wider public in case of a crisis of a pan-European financial institution. This is likely to exacerbate uncertainty in times of crisis.
- Effective crisis management depends on the smooth interplay of various authorities involved in crisis management (central banks, financial supervisors, finance ministries, deposit insurance schemes and market participants). While this interplay functions more or less at the member state level⁴⁵, a similar interplay has not been tested at the EU level.
- In the absence of pan-European structures for crisis management and due to the accountability of national authorities to their respective jurisdictions only, national authorities have an incentive to ring-fence the respective national operations of a financial institution in crisis.

These and other deficiencies have been noted by EU member states and EU authorities. In August 2007, the Economic and Financial Committee (EFC) agreed on principles for crisis management in the EU, setting out basic principles for crisis management, calling for a common analytical framework for the assessment of crisis situations and committing member states to the conclusion of a new memorandum of understanding between all the authorities involved across the EU. The report commits all member states to view the crisis of a pan-European financial institution as a “matter of common interest”. It also defines a number of practical measures, including a work plan, to address the above-mentioned deficiencies in the current institutional set-up. Essentially, the EFC report goes as far as is possible under current arrangements in trying to ensure that the crisis of a pan-European financial institution will be dealt with appropriately. It remains to be seen, though, whether these arrangements will prove sufficient – especially since they do not fundamentally change the incentive patterns for the authorities in member states.

transparency on risks, exposures and risk management processes, and the right incentive structures, including compensation arrangements.

⁴⁴ Note that this does not necessarily nor logically mean that the ECB become the banking supervisor (for large EU banks). It merely means that there must be a supervisory structure that centralises the supervision of systemically important financial institutions in the EU.

⁴⁵ For instance, in recent months, the processes have proven to work well in Germany (Sachsen LB, IKB), less so in the UK (Northern Rock), where the tri-partite agreement between BoE, FSA and HMT was found wanting and is due to be revised.

Some general considerations on crisis management

It is well understood that the resolution of financial crises is more of an art than a mechanistic application of pre-determined rules. This holds true both in case of difficulties of an individual institution and, a fortiori, in case of a system-wide crisis. In addition, it should be noted that crisis resolution does not only rest on (semi-)official institutional frameworks, such as deposit insurance / insurance guarantee and lender of last resort. Private sector involvement has always been another important element for three reasons. First, it enlarges the pool of available resources. Second, it is often indispensable for the orderly wind-down of a failed institution in order to provide for the continuity of outstanding contracts in financial markets, so that chaos is prevented (LTCM is a case in point). Third, it is assumed that private sector involvement has a positive impact in terms of market discipline and limits the costs of crisis resolution to the general taxpayer. While, therefore, a good case can be made for private sector involvement, its limits must also be acknowledged. For instance, private sector engagement can never fully substitute for the lender-of-last-resort function as private actors cannot create ultimate liquidity on their own. Also, there are obvious and well-acknowledged limits to private sector involvement, viz when doing so threatens to endanger the viability of the hitherto healthy part of a financial system.

It is an equally open question whether an exclusively private sector solution would in fact provide a sufficient amount of funds for the rescue or at least the orderly winding down of a systemically relevant institution, let alone in case of a large-scale banking crisis. Experience with banking crises in industrial countries over the last two decades suggest that the answer to this question is "no". Consequently, in these cases some combination of official money (fiscal funds and central bank money), private funds and deposit insurance / insurance guarantee funds will be necessary.

Source: EFR (2005)

CHARTS

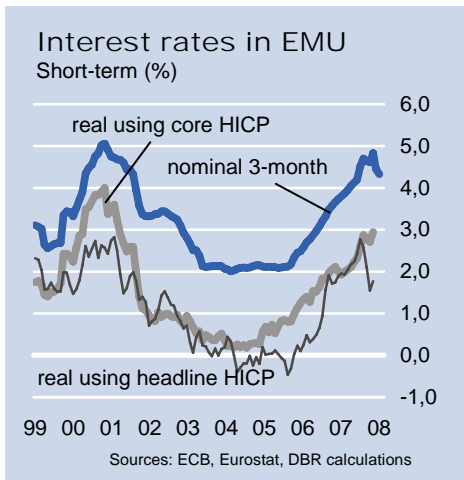


Chart 1



Chart 2

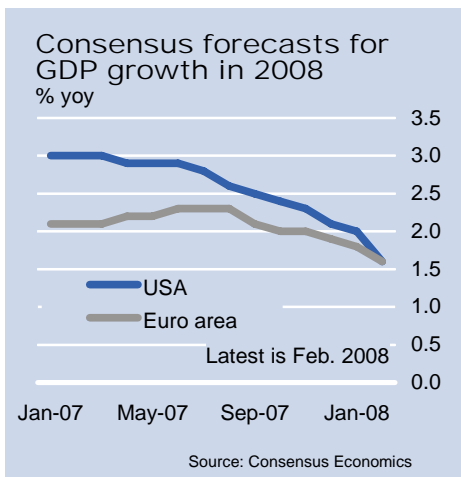


Chart 3

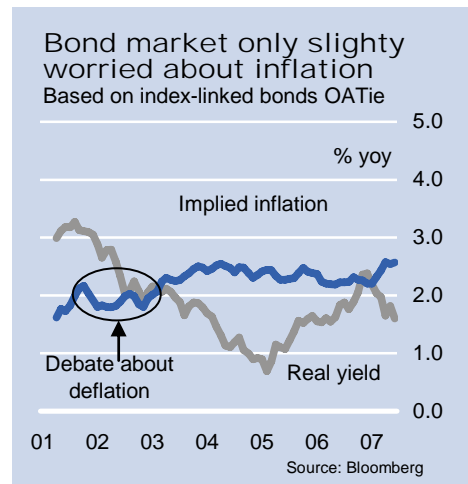


Chart 4

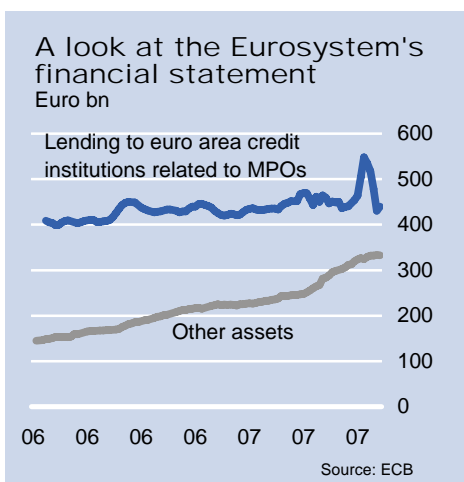


Chart 5

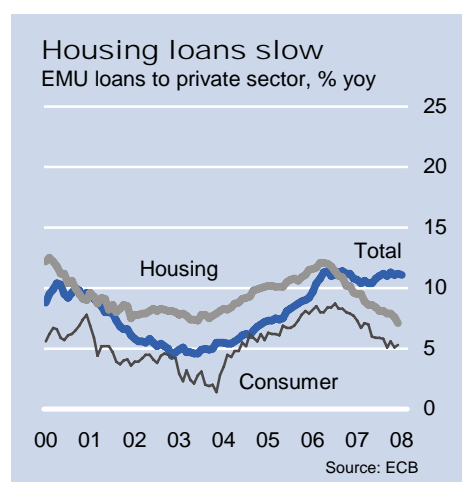


Chart 6

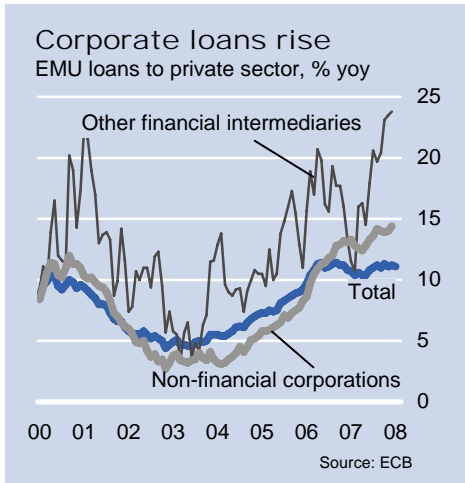


Chart 7

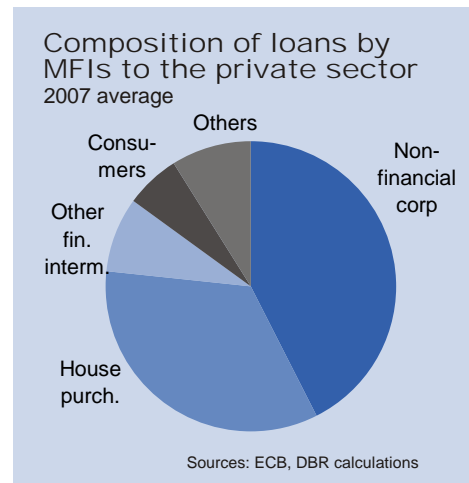


Chart 8

SHOULD THE ECB ADOPT A FLEXIBLE INFLATION TARGETING?

Briefing Paper for the Monetary Dialogue of March 2008 by the Committee on Economic and Monetary Affairs of the European Parliament with the President of the European Central Bank

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Introduction

Inflation targeting has been successfully adopted, since the early 1990s, by the central banks of more than twenty countries both developed and developing. New Zealand (1990) was the first, followed by Canada (1991), UK (1992) Australia, Sweden, Finland and Norway (1993), Spain (1995) and then by Brazil, Korea, South Africa, Thailand, Mexico, Russia, Czech Republic, Hungary, Poland and lately Japan.

A series of very important monetary policy research economists, including Lars Svensson, Mervyn King, Glenn Rudebusch, Juergen Von Hagen, Guy Debelle, Leonardo Leiderman, Ben Bernanke, Frederic Mishkin, Stephen Cecchetti and Michael Woodford have been forging the theoretical case for the introduction of inflation targeting by these central banks. Nevertheless, Mervyn King (2005) recognises that today “monetary practice is ahead of monetary theory”.

Moreover, it is a fact that most of those central banks which adopted inflation targeting did it because they recognised the failure of their previous monetary policy frameworks, based on the choice of monetary aggregates and the exchange rate as intermediate targets. Thus, the collapse of the fixed exchange rate regime or the ERM crisis in 1992-93 in some cases (UK; Sweden, Finland, Spain) or the failure of discretionary monetary policy in others (New Zealand, Canada and Australia) made it compelling to choose inflation targeting. In some cases it was also the result of the newly gained legal independence by the central bank and of the need to gain at least “operational credibility”.

Their choice of an inflation target has also generated a large debate between those that have chosen the headline CPI and those that have preferred the core or underlying CPI. The problem of the headline CPI is that it is affected by a number of shocks that cannot be controlled by monetary policy and do not reflect the underlying inflationary pressures that should be what the central bank be worried about. I refer to changes in indirect taxes, commodity supply shocks etc. The problem with underlying inflation is that usually it does not have similar desirable features of statistical simplicity and general acceptability as the headline CPI and, therefore, it tends to have a smaller impact on inflation expectations. The obvious solution to this issue is either to choose headline inflation but including an escape clause or some caveats to turn to core inflation or to stick to underlying inflation that it is the price index that a central bank is best able to control.

Another important issue among those central banks has been the choice of the numerical inflation target or the band. Targets are either range targets or point targets that are only supposed to hold on average and, in either case, this means that the inflation rate is not going to be kept constant at some preset level. Some limited volatility of the inflation rate needs to be tolerated, not only because some uncontrollable shocks are likely to affect inflation but also because monetary policy technology is not accurate enough to forecast or to bring about, finely calibrated changes in the inflation rate.

These are the reasons why, where the target is precisely defined, the usual band width is 2 or 3 percentage points. The width of course depends on the credibility of the central bank, the less credibility the narrower must be the range or band. No central bank has chosen a price level target, because although it reduces the uncertainty about the future price level, it is more restrictive since it implies that high inflation in one period must be compensated by low inflation in the next and also because the level is less flexible to accommodate supply-side shocks. The targets are usually set initially for some future date, at least two years ahead, as the bank of England does, and a transition target is usually set when actual inflation is higher than targeted inflation. By contrast other, like the Reserve Bank of Australia, establish a range “over the cycle” instead of a time horizon.

There are also two types of inflation targeting. The “rigid” one, as that followed by New Zealand, where achieving the stated inflation target is the only objective, and the “flexible” target, as that followed by almost all other countries, where other variables are also taken into account. As a matter of fact, virtually all countries which practice inflation targeting use some form of a “flexible” definition, not least as many countries seek to minimise the so-called output gap in order to achieve the stated target.

Finally, Lars E.O. Svensson and Michael Woodford (2005) have shown the important role of economic forecasting on inflation targeting, so that they think that “inflation-forecast targeting”, is the optimal monetary policy. Woodford (2007) thinks that the US FED should be ready to adopt it because it makes sense, given that quantitative projections play already a major role in the internal deliberations of the FOMC and because its actual Chairman, Ben Bernanke, when he was only a member, mentioned that “the Federal Reserve relies primarily on the forecast-targeting approach”.

By this definition, they mean not only just a public announcement of an inflation target, which of course is a necessary condition, but also a commitment to a specific structured approach to deliberations about monetary policy actions and a corresponding framework for communication about the justification for those actions. That is, a central bank that practices inflation-forecast targeting is also committed to adjust its instrument or instruments of policy (typically, this means its operating target for an overnight interest rate) in whatever way proves to be necessary in order to ensure that the bank’s quantitative projections of the economy’s future evolution satisfy a specific target criterion.

For example, the Bank of England has often stated that its monetary policy is intended to satisfy the requirement that the projection for a particular measure of inflation (currently, one based on a CPI) equals 2.0 per cent at an horizon of eight quarters in the future (2 per cent in 2 years) Although this description is plainly an oversimplification of the Bank’s actions, each issue of the Bank’s quarterly “Inflation Report” begins with an overview of the justification of the current stance of policy that contains two “probability fan” charts:

The first fan chart indicates the probability distribution of possible future evolutions of GDP (measured as the percentage increase in output on a year earlier) over a three year horizon, but with a vertical dotted line at two year horizon. The second fan chart shows the probability distribution of possible future evolutions of inflation (measured as the percentage increase in prices on a year earlier) over a three year horizon, but with a dotted vertical line at the two year horizon. Primary emphasis is given to the second fan chart in judging that the evolution of policy assumed in constructing the projections is suitable, which means that following that policy there will be a high probability that the 2.0 percent inflation rate will be crossing the vertical dotted line two years later.

This forward-looking decision procedure allows the central bank to use all available information about the current outlook for the economy, including non quantitative information or “judgment”, in determining the appropriate level of interest rates. Thus, there is a specific target criterion, which favours both focus in the decision making process and predictability of its Policy Committee decisions, instead of an intermediate target.

That is, inflation-forecast targeting is not tied to a mechanical formula that makes monetary policy a function of some very small set of present economic variables (like the Taylor Rule, which establishes that the FED Funds rate should be a linear function of inflation over the previous four quarters and the current output gap) and shows that the relation between the current economic variable to the variable that one wishes to stabilise may change over time.

Inflation-forecast targeting also involves a commitment to regular publication of the projections on the basis of which policy decisions have been made, typically through reports (like the Inflation Report of the Bank of England published four times a year). These publications help to anchor inflation expectations in several ways: First, they make the policy commitment of the central bank verifiable. Second, they allow people to observe how the central bank processes and responds to economic developments of various types, which are widely discussed in every report. Third, the publication by the central bank of its own view of medium term outlook for inflation also helps to anchor its expectations even if actual inflation is higher than the one predicted.

Although there is only one numerical target and that inflation target is the primary concern of the monetary policy decision, this does not mean that projections of real variables should not be taken into account in monetary policy decisions, so that the evolution of these real variables may induce the central bank to achieve the target more quickly or more gradually. The Norges Bank is the most explicit among inflation target practitioners to target real variables as well by not only targeting inflation close to 2.5 per cent a year, but also targeting that projections should provide a reasonable balance between the path of inflation and the path of capacity utilization. Thus, the two criteria are not competing goals but must be balanced with one another.

In any case it is well known that while in the case of inflation, monetary policy can achieve pretty much any long-run desired average rate, in the case of real variables, such as growth or employment, monetary policy can have short-run effects, but very little ones over longer periods. In sum, according to Michael Woodford inflation-forecast targeting central banks should be more explicit about the near-term target criteria that their projections are expected to satisfy, rather than only speaking about their medium-run targets for inflation. It is important to specify not only the inflation rate that should be expected in the medium-run but also the nature of an acceptable path by which the economy is expected to approach it.

Empirical evidence about inflation-targeting countries

Most empirical evidence shows that the countries which have adopted inflation targets tend to have a lower inflation rate and lower business cycle volatility. Ben Bernanke et al (1999), Vittorio Corbo et al (2002), Manfred Neumann and Jürgen Von Hagen (2002), Yitan Hu (2003), Edwin Truman (2003) and Laurence Ball and Niamh Sheridan (2005) have all gathered the evidence that: First, inflation levels, inflation volatility and interest rates have declined after countries adopted inflation targeting. Second, output volatility has not worsened and if any has improved after its adoption. Third, exchange rate pass-through seems to be attenuated by the adoption of inflation targeting. Fourth, nevertheless, inflation targeters have not done better in the evolution of the said variables than non inflation targeters such as the US and Germany.

Laurence Ball and Niamh Sheridan (2005) argue that inflation targeting does not make a difference in industrial countries given that inflation tends to reverse to the mean in the long-run. Thus, as countries which introduce inflation targeting had a higher inflation rate, their inflation has fallen a higher speed than the one of the non targeters which had already a lower initial inflation rates. So, all have improved with different systems of monetary policy targets. Nevertheless, this view has been highly criticised by Markus Hyvonen (2004), Marco Vega and Diego Winkelried (2005) the IMF (2005) and Nicoletta Batini and Douglas Laxton (2007) who provide new evidence, based on using samples that include emerging economies and different specifications and estimation techniques, that inflation levels, persistence and volatility are lower in inflation-targeting countries than in non targeters.

But the adoption of inflation targeting is clearly an endogenous choice, as Frederic Mishkin and Klaus Schmidt-Hebbel (2002) and Mark Gertler (2005) have shown, therefore, the finding that better performance is associated with inflation targeting may not imply that inflation targeting causes this better performance. The fact that the performance of the inflation targeters has not improved that of the US and Germany shows that what really matters for a successful monetary policy is establishing a strong nominal anchor. But recent evidence shows that inflation expectations seem to be better anchored by inflation targeting than by other nominal anchors (Refet Gürkanyak, Andrew Levin, Andrew Marder and Eric Swanson, 2007), (Andrew Levin, Fabio Nattalucci and Jeremy Piger, 2004) and (Efram Castenuovo, Sergio Nicoletti-Altimari and Diego Palenzuela, 2003).

More recently, Frederic S. Mishkin and Klaus Schmidt-Hebbel (2007) review all these evidences using a panel of inflation targeting countries and a control group of high-achieving industrial countries that do not target and find that inflation target helps to achieve lower inflation in the long-run, smaller inflation response to oil price and exchange rate shocks, strengthen monetary policy independence, improved monetary efficiency and obtain inflation outcomes closer to targets levels. Despite these favourable results for inflation targeting, their performance seems to be no better than the small control group of highly successful non-inflation targeters.

Is really the ECB an inflation targeter?

Some economists consider the ECB as an inflation targeter, although with a target less well defined than those mentioned earlier. William Buiter (2004 and 2006) considers that the ECB is using an inflation target that dare not to speak its name, although he thinks that its target it is asymmetric and awkward. Jean Pisani-Ferri, Philippe Aghion, Marek Belka, Jürgen Von Hagen, Lars Heikensten and André Sapir (2008) think that the ECB has a de facto inflation targeting framework that lacks transparency and that it should be converted, as soon as possible, into an explicit inflation targeting framework.

For this reason it is then important to look at the differences and similarities between the ECB monetary framework and that of the inflation targeters:

Inflation forecasts are at the centre of inflation targeting strategies and policy discussion and communication are organised around the forecast process and decisions are explained on the basis of deviations of the inflation forecast from an inflation target at a medium term horizon. The ECB also produces semi-annual forecasts (in June and December) instead of on a quarterly basis, as most of the inflation targeters, but two internal updates are made in March and September.

But the ECB projections are based on a combination of models and expert judgments and produced and owned mainly by its staff under the responsibility of the Monetary Policy Committee, composed of senior staff from the ECB and the national central banks. Their final report is put to the ECB's Governing Council. The ECB publishes summary reports of both the Eurosystem and the ECB's staff projection exercises on the ECB's web-site on the same day that are presented to the Governing Council and later on the ECB's Monthly Bulletin.

The main difference of the ECB with the inflation targeters is that these forecasts do not constitute the main vehicle around which the policy process and communication is organised. Publication of these forecasts on the ECB Bulletin is only intended to make clear the information set is available to the Governing Council when taking decisions, but not to explain them. The ECB's Governing Council bases its policy judgement and decisions not only on these forecasts but also on other many inputs, which include competing forecasts from other private and public organisations as well as other pieces of information that, for a number of reasons, are difficult to integrate into the ECB's framework of projections.

Another major difference with inflation targeters is the existence of a monetary pillar, based on the three month moving average growth of M3, which also played the prominent role in the decision making process since it was considered the first pillar. But, in 2003, the ECB took a right decision by changing its monetary strategy making the monetary pillar lose most of its prominent role and by retain it only in order to recognise that money and credit growth are also useful indicators in judging medium to long term trends in price increases. By contrast, more weight was given to the economic analysis of the second pillar that has become the prominent element to identify short to medium run risks to price stability.

Miguel Angel Fernández Ordoñez (2007), the Spanish Central Bank Governor, has recently given the reasons why the ECB does not consider these forecasts to be the main vehicle for its monetary policy decisions and for its explanation and communication to the public and why the monetary pillar needs still to exist. His arguments are the following:

First, the inflation targeters use a framework where monetary policy responds to deviations between a conditional inflation forecasts at a specific time horizon (around two years) and the inflation objective. But he considers that this approach neglects the implications of policy for price stability at longer horizons. According to him, short term inflation control is not enough to prevent the emergence of imbalances, which may lead later to costly episodes of macroeconomic instability.

A case in point is the recent episode of a long period of low rates of interest and over-abundant monetary and market liquidity, which has ended in excessive risk taken and in problems of liquidity in many financial institutions and of solvency in some others. This is the reason why the ECB monetary strategy abstains from specifying a fixed time horizon for policy and why it accords due importance to assessing medium to long term risks to price stability.

Second, the use of inflation forecasts to make and explain monetary policy decisions is too rigid. On the one side, information that becomes available after the cut-off date for the projections cannot be, by definition, incorporated in the exercise, while the ECB Governing Council uses as well the most recent data and analysis from other sources to cross-check the inflation forecasts of the staff. According to him, this monetary policy approach to the assessment of economic developments and the outlook for price stability encourages cross-checking between different forms of analysis, is more flexible, more diversified, more pragmatic and robust and helps to avoid major policy errors.

Third, even the state of the art macroeconomic models used by central banks are yet unable to fully incorporate a richer description of the economy's financial structure. Wealth effects, swings in asset prices, credit and liquidity constraints, and other financial frictions are not taken into account. These models have also difficulty identifying and estimating, with any degree of precision, the potentially significant role of financial variables and financial intermediation in the monetary transmission mechanism. That results in an oversimplified view about the channels through which monetary policy can affect economic activity and inflation.

Nevertheless, Fernández Ordóñez reckons that academic research is progressing and, at some point in time, workable operational models will be developed that will allow for more realistic settings where complex interactions between the real and financial sectors of the economy are acknowledged in full and where financial variables (notably, money and credit) play an active role in the monetary transmission mechanism. When this has been achieved, it will be possible to turn the two pillars of the ECB analysis into a larger, single pillar, as mentioned by Vice President Lucas Papademos (2006).

Therefore, it seems as if it would be only a question of time to expect the ECB monetary policy strategy becoming much closer to that of a flexible inflation targeting one.

Can the ECB get closer to flexible inflation target monetary policy?

In the meantime, two recent reports with similar approaches to these important issues have appeared lately: One by Bruegel, which looks for a straight and definite move to inflation targeting and the other, by CEPR, which asks for some intermediate steps needed before switching later into inflation targeting.

The first is the latest report by Bruegel (2008) on the Euro Area, written by Pisani-Ferry, Aghion, Belka, Von Hagen, Heikensten and Sapir, makes three recommendations for the ECB to stepping forwards into a best practice inflation targeting.

First, the ECB should integrate its economic analysis and its economic analysis into a single analytical framework. It also should set a band around its de facto inflation target of two percent, make it explicitly symmetrical and implement the targeting in a flexible manner.

Second, the ECB should publish forecast for inflation and GDP that reflect the views of the Governing Council. An inflation target, together with forecasts, will provide a better foundation for communication and it would provide a good basis for dialogue with the Euro-group.

Third, the ECB should voluntarily inform the Euro-Group that it has adopted a reformed inflation target and the Euro-Group should respond with an unequivocal endorsement (through an exchange of letters) to show public support for the improved framework.

These three recommendations are very ambitious and may be difficult to implement, so that they should be a blueprint for the future.

Transparency, Communication and Governance

The second is the recent report by the CEPR (2008) “Monitoring the European Central Bank” No. 6, by Petra Geraats, Francesco Giavazzi and Charles Wyplosz, which shows that financial markets still take a long time to understand the ECB’s monetary policy decision making. This lack of full understanding by financial markets ends up reducing its efficiency concerning monetary conditions and inflation expectations. The authors reckon that, at the present time, with the policy rate now close to neutral, financial markets face great uncertainty about the next policy move, including its direction. This shows how important it is for the public to understand the reasoning behind the ECB’s policy decisions, given that in a democracy, central bank independence must be constantly defended and the only defence is popular support.

Central bankers are non-elected officials to whom, important tasks are delegated. They must account for their decisions, of course, but when confronted with powerful critics, they cannot ignore public opinion. Communication is central to obtaining popular support and support can be eroded by determined politicians, as shown by recent evidence of its declining trust among French citizens. The solution is better communication and not just toward financial markets. Communication, in turn, must rest on a clear strategy and a high degree of transparency.

How to achieve this greater transparency? First, by publishing voting records, without attaching names to votes, the situation would improve. Although the ECB claims that monetary policy decisions are always consensual, consensus is a vague concept and need not amount to unanimity. The voting patterns of other central banks, which are most transparent, strongly suggests that that it is extremely unlikely for a central bank to always decide by complete unanimity. Disclosure of individual monetary policy votes could subject central banks governors to national political pressures, but the ECB can publish un-attributed voting patterns.

Second, the ECB can gain transparency by publishing its anticipated interest rate path. Policy effectiveness depends on the central bank ability to shape expectations. Helping the markets anticipate the next decision is not enough, because markets care much more about the future course of action. This one is the most frequently asked question at press conferences or other events. Over time, evasiveness has been replaced by the use of code words, forcing central bank watchers to develop considerable linguistic skills. But code words may be misinterpreted and its very imprecision reduces the effectiveness of monetary policy. The trade-off is not between an explicitly revealed interest rate and complete silence but between explicit communication and foggy signals.

Third, the internal organization of the ECB should be reconsidered, separating the role of the Executive Board members from the responsibilities of running the bank. Responsibility for overseeing the business should be limited to the president and vice president, delegating in a general manager and several sub managers. This would free up the other four Board members to preparing and communicating monetary policy decisions. The fact that the Board members have multiple functions dilutes the job description and widens the scope for political meddling when they are appointed as it has happened in some cases.

Fourth, meetings should be less frequent. Moving to the six week frequency as the FOMC, could help extend the time the Council dedicates to monetary policy decisions, while technical issues could be delegated to national central bank deputies. Finally, the ECB should report which Council members attended the meetings and the voting rights should not be delegated to an alternate.

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INFLATION TARGETING – AN ALTERNATIVE MONETARY POLICY STRATEGY FOR THE ECB ?

**Briefing Paper for the Monetary Dialogue of March 2008 by the Committee on
Economic and Monetary Affairs of the European Parliament with the President of the
European Central Bank**

GUSTAV A. HORN

Executive Summary

Inflation targeting – an alternative monetary policy strategy for the ECB?

The two pillar strategy of the ECB may lead to conflicting signals for monetary policy, as is presently the case. The problem is seen in the way the ECB communicates the conflicting outcomes of the two analyses. Analysts feel they do not really know e.g. why the ECB presently leaves interest rates unchanged. The fear is that this uncertainty about the underlying reasoning feeds into inflation expectations and hampers the effectiveness of monetary policy.

The most prominent candidate to replace present ECB strategy is inflation targeting. The idea is that a quantitative target enables the general public to form expectations fairly easy and that people will behave according to these expectations. Three examples of inflation targeting, the central banks of UK, Canada and of New Zealand, are compared to the ECBs strategy. It turns out that even without inflation targeting the ECB succeeded in stabilising expectations at least as good as the other central banks such that despite actual inflation pressures from energy prices there is no deterioration of expectations that may reduce the effectiveness of monetary policy.

As the analysis shows, there is no fundamental problem. Despite its relatively complicated target structure and the somewhat difficult present situation the ECB has succeeded to establish inflation expectations that are basically in line with the target. A fundamental communication problem does not seem to exist. Nevertheless marginal improvements are possible. Indeed, the ECB should skip the second pillar. Instead monetary aggregates should be routinely incorporated into the usual inflation forecast. Basically this amounts to the recommendation to shift from the two pillar strategy to a one pillar strategy of inflation targeting. Furthermore the ECB should rephrase its target in favour of a symmetrical interval around the target rate, reaching from 1 to 3 %. This simplifies the communication of why and how the ECB reacts only sluggishly to external price shocks. As long as just external energy prices drive the inflation rate upwards there is no need to worry. Only if domestic second round effects occur the ECB must act swiftly.

1. Introduction

The monetary policy strategy of the ECB has been frequently criticized (cf. Sorbe/Wollmertshäuser 2007). The basic problem is that the two pillar strategy may lead to conflicting signals for monetary policy, as is presently the case. Hence, it is very difficult for the ECB to explain her action or non-action to the public.

The present situation is seen as a good example for a bad practice. Inflation rates are presently well above the inflation target of close to but lower as 2 percent. Nevertheless the Euro area is not in a typical inflationary environment. Wage rises that typically soar in case of inflation still increase only moderately. Against this backdrop an inflation triggering wage-price spiral is highly unlikely. The reasons why inflation is relatively high are relative price shocks, not a rise in the aggregate price level stretching more or less over all goods and services markets. In particular, energy prices have risen significantly year by year. This reflects on the one hand higher global demand with supplies being hampered by international policy turmoil of varying nature (war in Iraq, bad weather in the Caribbean etc). But on the other hand a structural change in price formation is the major driving force. Prices on energy markets are more and more determined on financial markets trading forward contracts. In this setting actual supply and demand are of minor importance. Instead, there is more speculative behaviour but also more forward oriented trading in the light of limited oil resources. All this has contributed to the relative rise of energy prices, but this is not inflation. Consequently most inflation forecasts assume that price rises will fade and inflation will return to the stability target. Hence, there is no need to tighten monetary policy.

The second pillar of ECBs monetary strategy on monetary developments, on the contrary has indicated since years that monetary policy is too expansionary, since the growth of the relevant monetary aggregates is well above the once defined reference value of 4.5 %. Consequently, monetary policy should be tightened. The problem is seen in the way the ECB communicates the conflicting outcomes of the two analyses. Analysts feel they do not really know why the ECB presently leaves interest rates unchanged. The fear is that this uncertainty about the underlying reasoning feeds into inflation expectations. If these start to rise because market participants think that the ECB should follow a tighter policy, price stability is endangered. Employees start to ask for higher wages and firms start to charge higher prices. In order to ensure stable expectations the ECB is asked to follow a more clear-cut strategy that allows only for non conflicting monetary analysis outcomes. In that case, policy actions of the ECB can be explained exclusively in the light of that strategy and there is no room for speculations that may destabilise inflation expectations. Beyond doubt these arguments show some logic. However it is remarkable that inflation expectations of the very same analysts, who fear unstable expectations, are - as ECB monthly bulletins show - stable, despite the supposedly unclear strategy. Nevertheless a replacement of the present strategy is recommended.

The most prominent candidate to replace present ECB strategy is inflation targeting. The strategy will be outlined in the next section and some experiences will be discussed. The final section deals with recommendations for the ECB strategy.

2. On Inflation Targeting

The basic idea is that a central bank sets its own quantitative targets and reveals them to the public. A quantitative target enables the general public to form expectations fairly easy and people will behave according to these expectations. If the central bank fixes an inflation target, it is assumed that everybody incorporates the target when fixing wages and prices. In doing so price stability is ensured without the necessity of a central bank to cool the economy down by a stabilizing recession or to stimulate it by a very expansionary monetary course. Boom and bust cycles should be overcome this way.

There is a distinction between strict and flexible inflation targeting (Svensson 2007). The former means, a central bank should select an inflation target only. The target is defined as an inflation rate or an interval of inflation rates. Monetary policy should then be designed to meet the target. A flexible inflation target strategy additionally includes an output target, more precisely an output growth target. Then the central bank is obliged to attempt to meet both targets at each point of time. A more complex flexible inflation target would even add targets referring to the variation of monetary instruments, interest rates (Svensson 2007). Since central bankers may be afraid to change interest rates too frequently, a minimisation of changes may also be a target. Since frequent changes may disturb expectations on the direction of monetary policy, central banks should attach a certain weight to each target and accordingly design their monetary policy appropriately. Some scholars (Svensson 2007) even demand that a central bank should publish these weights too, to inform the public precisely on the target function.

A very transparent central bank following an inflation targeting approach could also reveal information on the instrument used. In order to do so, it is necessary to publish forecasts on inflation without changing interest rates and as a second step the corresponding path for interest rates. With all these information provided, the general public is supposed to be able to form sound expectations anchored around the price stability target of the central bank. This setting is seen as ideal for monetary policy.

3. Three examples of Inflation Targeting

There are three prominent examples of central banks following an inflation targeting approach. These are Great Britain, New Zealand and Canada. In the UK the inflation target has been set by the government at 2 %. The bank is accountable to the parliament and the wider public to meet the target. If head line inflation trespasses the borders of an interval reaching from 1 to 3 %, the governor of the Bank of England has to write an open letter to the Chancellor to explain why this happened and to outline proposals how inflation can be brought back to the target within reasonable time. Thus there is some limited flexibility for pressure on prices to unfold, but there is strong political pressure for the Bank of England to meet goals agreed upon. In order to inform the public on its monetary policy action and to collect information on inflation expectations, the Bank of England carries out sophisticated surveys on the general public views and expectations on price developments. On the one hand they serve to detect unfolding inflation expectations on time. On the other hand the results of the surveys are published in order explain monetary policy action.

In New Zealand there is a formal agreement between the Minister of Finance and the Reserve Bank of New Zealand on policy targets, called Policy Target Agreement (PTA). It is bargained with each new incoming governor of the central bank. The stability goal is not exclusively defined by the government as in the UK.

The present PTA from May 2007 states that price stability is defined as an inflation rate interval reaching from 1 to 3 percent on average over the medium term.

In quarterly monetary policy statements the central bank has to explain what it has implemented since the last statement and what it proposes to achieve price stability. Furthermore a statement is made giving an outlook on the monetary policy plans for the next five years.

The Canadian inflation targeting is stricter. The Bank of Canada has to keep inflation near 2 % and within a target range of 1 to 3 %. This is much more restrictive than in New Zealand where only the interval has to be observed and this only “on average” and in the medium run and in the UK where the central bank just has to explain deviation and show a way back to the interval. But while inflation is measured in terms of total CPI inflation, that means headline inflation in the UK and New Zealand, the bank of Canada uses core inflation as operational guide. Core inflation is seen as a more reliable indicator of future inflation. Doing this, the medium aspect is in fact also included into the Bank of Canada strategy, but strictly within the interval. This strategy is – as in New Zealand – based on a joint commitment on inflation targets of the government and the central bank.

If these settings are compared to the ECB’s institutional framework, there are two fundamental differences and a lot of similarities with differences in detail only. The first difference is that there is no explicit commitment of the ECB to price stability for which it can be held responsible by ECOFIN or by the European Parliament. The instrument of a joint target statement is not applied in the Euro area. There is only the general obligation of the ECB to ensure price stability as its predominant goal under the provisions of the Maastricht treaty. That does not include a quantitative target or target range for tolerated inflation. The quantitative target of below but close to 2 % has been set only by the ECB itself. Against this backdrop it is fair to conclude that the ECB is significantly less accountable than the central banks of New Zealand and Canada. The second fundamental difference is the two pillar strategy. Instead of following a single target function there are two, creating the respective communication problems outlined above.

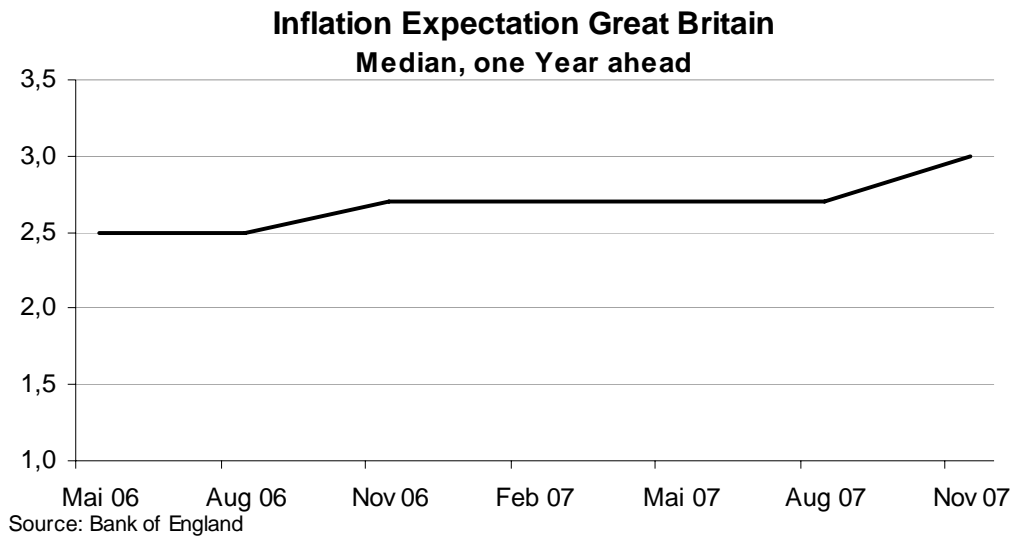
The minor differences refer to the quantitative inflation target. In this respect the ECB is somewhat stricter and vaguer at the same time than the other central banks. On the one hand the ECB aims to achieve a very specific inflation rate of slightly less than 2 % instead of an interval as the other central banks. This is far more challenging. On the other hand it wants to achieve this goal “in the medium run”. Deviations are allowed but only for an undefined limited space of time and with no specific maximum or minimum rate mentioned. In the UK, New Zealand as well as in Canada the interval borders have to be observed. In Canada this has to be the case at each point of time, in New Zealand on average and in the UK after a reasonable time of adjustment.

Taking all these provisions together, obviously one cannot say that the goals of one central bank are significantly stricter than those of the others. But it is clear that the ECB strategy is much more difficult to communicate because of the two pillar strategy and some vagueness of the inflation target definition. Moreover the ECB is less accountable for achieving the target.

4. Are inflation expectations affected?

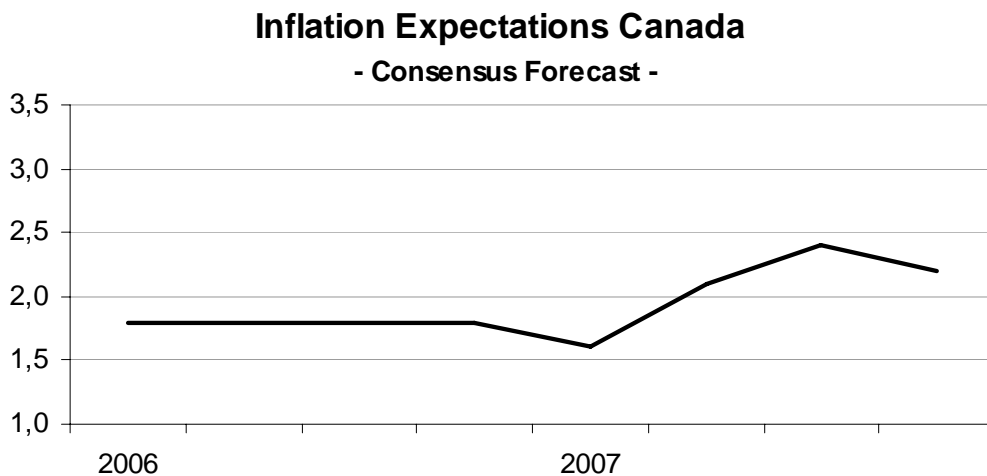
The decisive question is whether the institutional setting in the Euro area shows detrimental effects on inflation expectations. This is especially important at a time when inflation rates are above target as is presently the case in the Euro area. If the already and for quite some time elevated inflation rates fed into expectations, it would get more and more difficult to return to price stability without a stabilizing recession. Looking at recent developments of inflation expectations there are interesting differences to be found.

Figure 1



In the UK inflation expectations have been subdued until autumn last year. But the November survey indicated a significant acceleration to 3 % while actual inflation is still even slightly below the target rate.

Figure 2

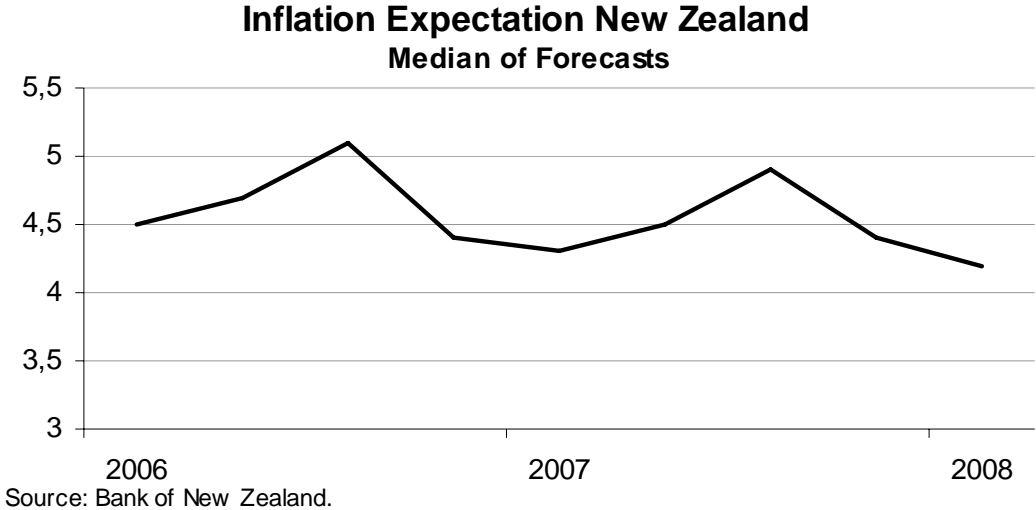


In Canada inflation expectations are a slightly above the 2 % mean of the target interval. At the same time, medium term forecast are perfectly in line with the target.

Recent headline inflation is with 2.2 % indeed slightly above the mean, but core inflation with only 1.4 % lies well below it. Both figures are within the target range. Hence there is no problem with inflation expectations in Canada and there are also no problems with inflation.

The situation is different in New Zealand. With 3.2 %, headline inflation is above 3 %, thus outside the medium term target range, and so are expectations (4.0%).

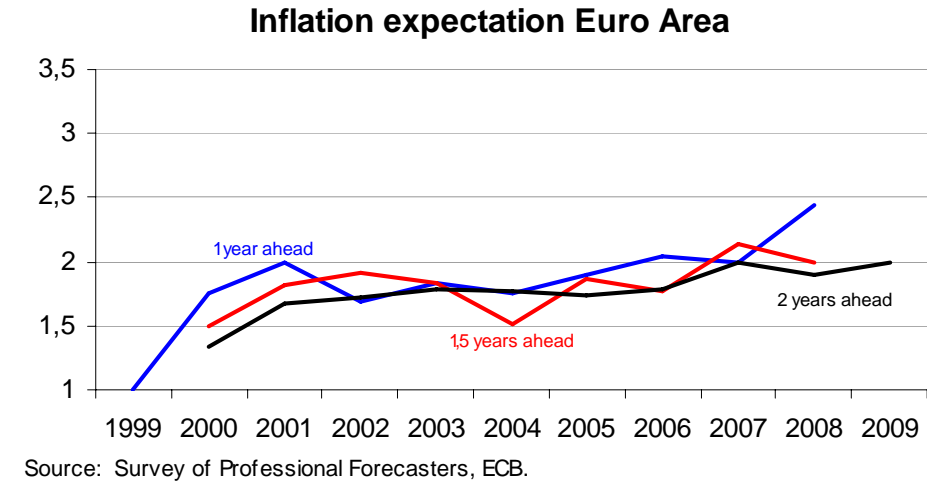
Figure 3



Hence, despite inflation targeting and very explicit rules price stability is endangered in New Zealand. The problem is - as in Europe - that energy prices soar while domestic price pressure is still subdued.

In the Euro area however there is almost no effect as far as expectations are concerned.

Figure 4



Only short term expectations (1 year ahead) are a slightly above the medium term target. Longer term outlooks are perfectly in line (2 years ahead) with the target, while headline inflation is above target.

Hence even without inflation targeting the ECB succeeded in stabilising expectations such that – despite actual inflation pressures from energy prices – there is no deterioration of expectations that may dampen the effectiveness of monetary policy.

5. Recommendations for the ECB strategy

First of all it seems fair to state that there is no fundamental problem. Despite its relatively complicated target structure and the difficult present situation the ECB has succeeded to establish inflation expectations that are basically in line with the target. A fundamental communication problem does not seem to exist. Nevertheless marginal improvements are possible.

The two pillar strategy is indeed very complicated to communicate. Furthermore the monetary pillar has not proven very reliable during the recent past (Bordes/Clerc/Marimoutou 2007). Therefore the ECB should skip it, since it may disturb expectations to some extent, especially at times when there are conflicting signals from both pillars. Instead, monetary aggregates should be routinely incorporated into the usual inflation forecast. If they are relevant for future inflation, they should be considered as being part of the strategy. Basically it amounts to the recommendation to shift from the two pillar strategy to a one pillar strategy of inflation targeting.

In order to calm excitement on any deviation from the 2 % medium target rate, the ECB should – as the Bank of Canada – to rephrase its target in favour of a symmetrical interval around the target rate, reaching from 1 to 3 %. This simplifies the communication of why and how the ECB reacts only sluggishly to external price shock as is presently the case. As long as external energy prices drive the inflation rate upwards there is no need to worry. Only if domestic second round effects occur the ECB must act swiftly. All these measures will only marginally improve the communication record of the ECB. This should not be surprising, because the first pillar of the present strategy is basically a way of inflation targeting. Its signals are only somewhat disturbed by the second pillar. Hence restraining monetary policy on one clear-cut pillar may help to some extent.

What is more fundamental for monetary policy is that the ECB should communicate that output also plays a role in its strategy. Hence the ECB should follow a strategy of flexible inflation targeting. There is no conflict with its primary goal of price stability as long as the weights are set appropriately and output developments also enter the inflation forecast. Sluggish output then would show a twofold impact. First it would usually reduce the inflation forecast and second it would also constitute a violation of targets in its own right. This kind of target change would have more beneficial effects on monetary policy than just changing the way of communicating the price stability target.

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INFLATION TARGETING AS AN ALTERNATIVE MONETARY POLICY STRATEGY FOR THE ECB?

**Briefing Paper for the Monetary Dialogue of March 2008 by the Committee on
Economic and Monetary Affairs of the European Parliament with the President of the
European Central Bank**

JEAN-PIERRE PATAT

Executive summary

In order to undertake their first mission which remains price stability preservation, central banks used monetary aggregates until the end of the eighties as early warning indicators of future inflation pressures. They have presently designed other and more diversified strategic instruments. Among them, inflation targeting strategy is, at least apparently, the most scientifically elaborated system. It consists of a public objective of price stability and in using a lot of monetary, financial and economic variables in order to obtain, with an econometric model, a precise forecast of future inflation at a relatively short-term horizon. The result of the model, in line or not with the objective, gives the central bank a solid basis for action.

According to these characteristics, such a strategy is by itself an assurance that the sole preoccupation of the central bank is inflation, and, as the results of the model are regularly published, a guarantee for monetary authorities strategy to be mostly more transparent than those of other institutions.

The Bank of England has been a pioneer in this approach after the United Kingdom left the EMS in 1992, but some emerging market countries have also adopted this method which provides an “anchor” to anticipations, likely to limit exchange rate fluctuations of “small” or medium size floating currencies.

Some analysts and economists argue that the ECB should adopt this monetary policy framework. According to them, such a change would make the monetary policy of the central bank more apparent than it is presently with the two-pillar framework the interpretation of which is puzzling.

For the time being, it seems that the admitted reluctances of the ECB towards this issue are technical as, in a multinational area where monetary and financial behaviours are heterogeneous, a solid model of demand for money is not easy to realise.

But we must go beyond these technical considerations. In our sense this strategy would not be opportune for at least two main reasons:

- Firstly, the inflation targeting strategy means that the inflation control is the alpha and the omega of central bank action. Regarding the ECB, and in spite of severe criticisms, it is obvious that its price stability objective is its main concern, but in practice there is some pragmatism. If not, monetary policy would have been more restrictive since 2002. Indeed, it can be observed that in countries where the central bank manages inflation targeting, interest rates are higher than in other countries. It is the case in UK but also in a lot of emerging market countries.
- The second reason concerns specific positions of big worldwide currencies and central banks.

These currencies don't need to offer an anchor to the rest of the world as their credibility is linked to other factors (financial market attractiveness, economic prospects...) They are heavy liners which don't move brutally and widely in the short term, and their movements are cyclical.

We have also to consider specific responsibilities of the biggest central banks in financial stability. In our sense, it would be counterproductive to adopt inflation targeting which would mean that in controlling inflation, all financial disorders would be avoided, which is not the case. Examples of past actions of the FED and of the ECB to preserve financial stability show that such a mission cannot be encoded and that the traditional corpus of central banking is not necessarily adapted in any circumstances. Consequently, an inflation targeting strategy would be, for major central banks, harmful at the very worst, and useless at the very best.

1) In order to undertake their first mission which remains price stability preservation, central banks need strategic frameworks providing advanced indications on the future evolution of macroeconomic variables. These frameworks are called intermediate objectives or "early warning" variables.

Until the end of the eighties, monetary aggregates were considered to be the best early warning indicators of future inflationary pressures.

The growing difficulties for correctly measuring money in a globalized financial system characterized by the multiplication of financial innovations have led monetary authorities to design other and more diversified strategic analysis instruments.

Considering the action of major central banks, we can assume that their early warning instruments refer now broadly to the same wide panel of monetary, financial and economic data, but that the utilisation of these data can be more or less empiric or judgemental.

The FED has a pragmatic and moving approach to the emphasis it puts on such or such variable, according to the circumstances – economic conjuncture, market evolutions, banking situation... The central bank strategic approach can be considered as mostly empiric, moreover it is relatively discreet (if not opaque) on the detail of its panel of data selection.

The ECB has tried to codify its data framework with the « two pillars » analysis instrument, the first pillar favouring monetary variables, especially M3, the second pillar referring to other financial and economic data. The central bank considers that, in publishing and commenting on this panel, it gives to the markets and economic agents clear indications about its decisional analysis and that such a transparency enhances the credibility of its action.

The third strategic framework, which is, at least apparently, the most scientifically elaborated system, is called « inflation targeting ».

It consists in a public objective of price stability, and in using a lot of monetary, financial and economic variables in order to obtain a precise forecast of future inflation at a relatively short-term horizon (let us say six months). In other words and concretely, inflation targeting strategy refers to a relatively robust econometric model of which the result is considered as an « early warning » instrument. Indeed, results of the model, in line or not with the public inflation objective, give to the central bank a solid basis for its action.

In a first analysis, one can consider that the inflation targeting method is simply a manner, of course more sophisticated, of a central banking approach not different from those of other monetary institutions.

But discrepancy could be more significant since:

- this strategy is by itself an assurance that the sole preoccupation of a central bank is inflation,
- the fact that the results of the econometric model are regularly published gives theoretically to the central bank strategy a transparency mostly greater than that of other institutions and, once again theoretically, allows a strong association of the market and economic agents with the monetary policy.

2) Inflation targeting is sometimes considered as being the ideal monetary policy strategy for a country with a floating currency, because it gives a solid anchor for economic agents' anticipations in showing clearly the central bank's determination regarding price stability.

The Bank of England has been a pioneer in the elaboration and utilisation of this approach after the United Kingdom left the EMS in 1992. Some emerging market countries have also adopted this method, although their full technical ability to elaborate the forecasts model which is the corner stone of the inflation targeting strategy, is uncertain.

In line with these developments, a lot of analysts and economists argue that the ECB should adopt this monetary policy framework.

According to them, such a change would make the monetary policy of the central bank definitely more apparent than it is presently. If the purpose of the two pillar presentation is to give a transparent assessment of the ECB strategy, the achievement of this objective is not easy as the analysts are faced to a lot of data of which it is difficult, even impossible, to understand which of them are considered to be mostly decisive for the final decision. This complexity is especially true regarding the monetary data (M3) the interpretation and utilisation of which are incomprehensible. With an inflation targeting strategy, things would be more clear and easy for markets and the central bank itself. Markets would have a simple indicator of the inflationary risks; the central bank would no longer be obliged to elaborate complex explanations for its decisions and especially to give a confused analysis of the high rate of growth of M3, far above its "reference value", and apparently disconnected of the level of inflationary pressures.

3) The ECB scarcely deals with this matter. It never said or even let presume that it could adopt an inflation targeting strategy (unlike the Fed whose new President clearly said at the beginning of his mandate that he seriously envisaged to adopt this strategy).

As far as we can interpret the messages of the ECB on this question, it seems that its admitted reluctances are rather technical.

Although inflation targeting has the appearance of a simple and heuristic system, its conception is in fact very complex.

As said above, this strategy does not come down to an inflation objective disclosure (that a lot of central banks, including the ECB, are already issuing). Its most important element is the early warning instrument which allows the detection of the risks of going past the target, namely the econometric model of short term inflationary forecasts. To elaborate such an instrument requires a very good assumption of the financial and monetary behaviours of the economic agents, to be exact of the money demand.

The ECB is regularly publishing papers about money demand in the euro-area, but the conclusions of these studies show clearly that the central bank considers the result not yet totally conclusive.

We already emphasized in previous papers the heterogeneity of the saving and indebtedness behaviours of the euro area economic agents. One can give some non-exhaustive examples: mutual funds are unequally developed; in some countries such as France, fixed rate saving accounts remain widespread (cf. the “livret A”); harmonisation of taxation on financial investments has been improving but more progress is needed; market instruments remain relatively not more used in other countries as Germany; preference for bank notes remains strong in some countries...

There is no concrete reason for these heterogeneities to be reduced, at least in the relatively short/medium term. Such a situation does facilitate the conception of a robust model of money demand in the area, and consequently, of valuable inflation forecasts, especially a short-term forecast model which is naturally more difficult to elaborate than a medium or long-term model.

We can consider that, among the central banks that use inflation targeting strategy, the Bank of England is the only institution which really implements it, as it owns a valuable early warning instrument with a solid model of short term inflation forecasts.

4) But we must go beyond technical considerations and, supposing these problems solved, wonder if it would be judicious for the ECB to adopt an inflation targeting strategy.

In our sense, such a strategy would not be opportune for at least two major reasons.

Firstly, in adopting the inflation targeting issue, the central bank is bound to an exclusive price stability objective.

Indeed, such exclusivity is in the logic of this strategy. Building an objective, reliable and public short-term inflation forecast instrument in order to point out the gaps with the final inflation target puts on view clearly that inflation control is the alpha and the omega of the central bank action.

Regarding the ECB, it is obvious that its price stability objective is its main concern according to its statute, but in practice there is some pragmatism: since 2002, the limit of 2% was exceeded during almost half of the period. The application of the inflation targeting strategy would have logically conducted to perform a more restrictive monetary policy.

In spite of severe criticisms that the central bank is enduring, serious studies about the ECB monetary policy practice have already shown that it has been concerned at least as much with economic growth supporting as with inflationary pressures monitoring. One can ask if it would be judicious to modify this efficient judgemental practice in introducing a perhaps more sophisticated, but also more restrictive strategy.

Concerning this first point, let us do three complementary remarks:

First, those who criticise the excessive attention paid by the ECB to inflation should be strongly against the adoption of an inflation targeting method, which would not be necessarily the case and is quite surprising.

Secondly, regarding the original intention of the FED President to adopt an inflation targeting strategy, one can assume that, if it had been the case, the central bank would have been somewhat embarrassed during recent months. It probably would have acted like it did but the credibility of its “strategy” would have been ruined.

Thirdly, those who are in favour of the adoption of this strategy are perhaps considering that it would have obliged the ECB to loosen its monetary policy more during the periods where the inflation rate was below the objective. Perhaps, but we consider on the contrary that the exclusive attention paid to inflation, which is in the logic of inflation targeting would have probably inspired a trend of more restrictive stances.

Indeed, it can be observed that in countries where the central bank manages such a policy, the interest rates are higher than in other countries. That is the drawback in areas strongly favouring price stability. It is the case in the UK: in 2004 and 2005, the Bank of England interest rates were exceeding the ECB rates by 2.75%, much more than the economic growth gap. The difference was presently of 1.25% while the economic growth gap was of less than 0.5. Even in emerging market countries, such high interest rates are observed: in Brazil, the real short term interest rates are about 10%, with a strong appreciation of the currency, while the economic growth is hardly reaching 3%, which is very disappointing for a poor country.

One can wonder if looking for credibility, which is the main motive for adopting an inflation targeting framework does not take away any margin for manoeuvre from monetary policy. Of course, one can free oneself from the forecasts, but in this case, what is the usefulness of a so sophisticated instrument?

Finally, it can be doubtful an inflation targeting strategy would make easier the dialogue between the ECB and the euro-area political authorities as the latter could have the feeling that they have no possibility to discuss the results of a complex and in other words opaque, inflation forecast.

5) The second main reason for rejecting an inflation targeting strategy is not limited only to the case of the ECB but concerns the specific position of big worldwide floating currencies and major central banks.

One can admit that little or medium-sized countries whose the currency is floating need to give an anchor to residents' and non-residents' anticipations, in order to avoid violent, large and destabilizing variations in the exchange rate. Such a concern is all the more justified if the economy is widely opened to foreign trade.

Countries with worldwide currencies are in a radically different situation for two main reasons.

First: they don't need to offer an anchor to the rest of the world. The credibility of these currencies is less depending on a specific forecast model for inflation or on a monetary aggregate than on the attractiveness of their financial market and the dynamism of their economy. Moreover, they are not widely opened to international trade: external transactions represent 10/12% of the US GDP, 14% of the Euro-area GDP. Finally, and as a consequence of these characteristics, these currencies are enormous and heavy liners which don't move brutally and widely in short periods of time. In fact, depreciations or appreciations of these currencies are cyclical. It took more than six years, between 2001 and 2007, for the euro exchange rate versus the dollar to increase by 50%. During the previous period, the dollar strengthened by 30% in almost three years.

If specific factors related to the characteristics of a very large economy may lead to consider that a monetary policy of inflation targeting is not optimal, there is another reason for being reluctant vis-à-vis such a policy: the special responsibility of major central banks with regard to financial stability.

6) Financial stability has become as important as price stability for central banks, even if, according to the relatively recent concerns on this issue, such a mission is generally not explicitly mentioned in their statutes.

In this area, the responsibility of the worldwide central banks, FED and ECB is crucial as the effects of their policy go by far beyond their national limits and as they are alone in a situation of dealing with financial globalization consequences on the contagion risks of turmoil.

It would be counterproductive to adopt an inflation targeting strategy, which would mean that by controlling inflation, all financial disorders would be avoided. We know that maintaining price stability is not a sufficient condition for preserving financial stability and that financial bubbles or turmoil, bank crisis, can occur in a context of low inflation.

In October 1998, the FED sharply decreased its interest rates, officially for facing a recession risk, in fact for avoiding bank crisis. With an inflation targeting strategy, the early warning indicators would probably not inspire such an action.

Inversely, the European Central Bank gradually increased its interest rates from 2% to 4% between the end of 2005 and 2007. In its explanation, the central bank emphasized mainly the inflationary risk. In fact, one can ask this risk to justify totally these movements and we can assume that an inflation targeting framework would have not required such an action. In fact, the central bank was worrying at least as much and perhaps more about real estate prices sharp rise than about prices of goods and services. With this action, it succeeded in creating conditions for a soft lending.

Of course, as already mentioned, adopting an inflation targeting framework does not prevent decisions being taken which are not in line with its results. However, a central bank which would act in such a way would be in contradiction with what this strategy is supposed to offer: a guarantee of price stability as the exclusive concern and a guarantee of transparency. Such a blurring message would not simplify the relations between the monetary authorities and the markets and economic agents.

Preserving financial stability is an action which cannot be encoded as central banks can face very various situations. The relatively short experience of this preoccupation, let us say the twenty last years, shows that the traditional corpus of central banking is not necessarily adapted in any circumstances and that pragmatism is better than doctrinal attitude. That is particularly obvious for major central banks which have worldwide responsibility. If their first mission must remain the preservation of prices stability, it is by far better they keep margins for manoeuvre in order to face unforeseen situation in a world where everything is now possible. Consequently, an inflation targeting strategy could be harmful at the very worst, and useless at the very best.

Coming back to the specific case of the ECB, and considering the wide panel of data that the central bank is enhancing in its two pillar framework, one can estimate that the institution has listed all the variables needed for implementing an inflation targeting strategy. It is doubtful, that the Bank of England considers a very different scheme. The difference is that it has systematised its approach and built a sophisticated inflation forecast model. The ECB did not act so, probably for the technical reasons we previously evoked, but also for keeping a judgemental margin for manoeuvre. Implementing what can be called a pragmatic inflation targeting scheme, which can be permanently improved according to the moving conjuncture of a financially globalized world, seems more adapted to the responsibilities of a worldwide central bank.

INFLATION TARGETING – AN ALTERNATIVE MONETARY POLICY STRATEGY FOR THE ECB?

Briefing Paper for the Monetary Dialogue of March 2008 by the Committee on Economic and Monetary Affairs of the European Parliament with the President of the European Central Bank

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Executive Summary

Inflation targeting rests on an explicit inflation target and inflation forecasts over a clearly identified horizon. It provides a coherent framework whereby the interest rate is set to bring inflation back to its target over the planning horizon. Flexible inflation targeting, the current practice in all inflation targeting central banks, allows the monetary authorities to decide how quickly to bring inflation to its targeted level taking into account other considerations like growth, employment, asset prices or the exchange rate.

The ECB's two pillar strategy attached special importance to money growth. Money growth targeting has been the hallmark of the Bundesbank but it lost its appeal in the 1990s when rapid changes in banking and financial markets have undermined its usefulness. While the monetary pillar has been demoted to second rank, it remains unclear why the ECB still attaches special interest to money growth. The official argument, that the ECB is well served by claiming continuity from the Bundesbank, may have been justified early on. Now it only clouds the monetary policy strategy. In fact, the ECB is widely seen as a closet inflation targeter. The result is that its deeds do not closely match its words. This discrepancy has an adverse effect on the predictability of future ECB decisions, with non-trivial costs in terms of policy effectiveness.

The ECB would be well advised to remove the monetary pillar and fully adopt the inflation targeting strategy. Doing so would involve the following steps:

- Announce an inflation target, hopefully higher than the “less but close to 2%” definition of price stability that it has been generally unable to achieve.
- Identify the horizon over which the target is to be reached. The current “medium run” is too vague to be operational.
- Publish the inflation and growth rate forecasts of its Board of Governors. Several examples of how this can be done can be used to that effect.
- Relate its interest decisions to discrepancies between the forecasts and the target.
- Ideally, for consistency reason, it should also publish the interest rate forecasts of its Board.

What is (flexible) inflation targeting?

Starting with the Reserve Bank of New Zealand in 1992, more than twenty central banks around the world have adopted the inflation targeting strategy. Strict inflation targeting consists in identifying an inflation target and a policy horizon, producing inflation forecasts at the relevant horizon, and adjusting the interest rate whenever the forecast differs from the target.

The target is commonly either a range – e.g. 0% to 2% – or a rate to which a tolerance margin is associated – e.g. 2% +/- 1%. In some cases the target is publicly set by a political authority (e.g. the Chancellor in the UK), in others it is the central bank's own choice (e.g. in Sweden), sometimes it is a formal agreement between the central bank and the government (e.g. in New Zealand).

The horizon is typically two to three years. This period corresponds to our current understanding of how long it takes for monetary policy to affect inflation. It is designed to avoid shorter run inflation changes that are not controllable by the central bank, for example the current impact of increases in oil and primary commodity prices or of exchange rate movements.

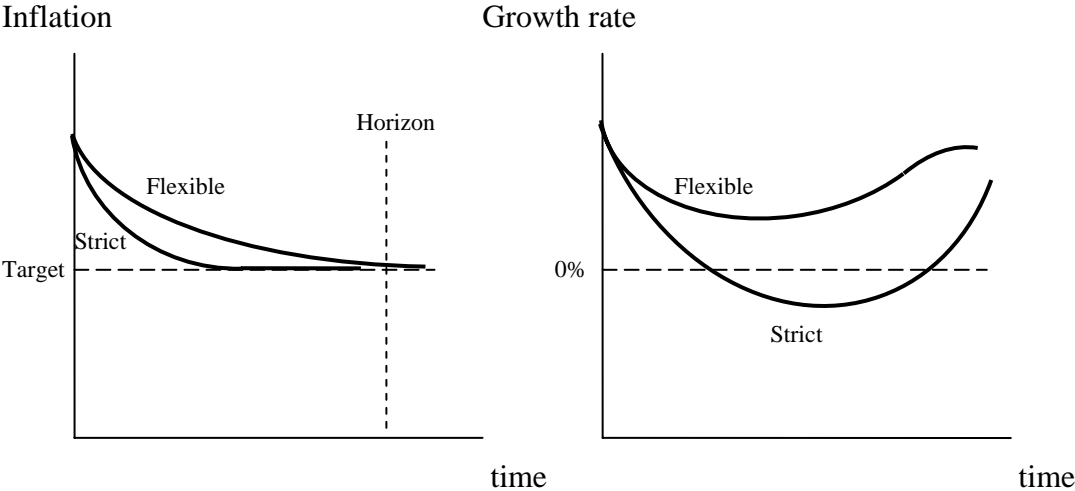
The forecasts are the central bank's best guess of the likely path of inflation. Two observations are important. First, the forecasts are not wishes, even less decisions; they are based on current information and, as any forecast, they are understood to eventually turn out to be imprecise, if not erroneous. Most inflation-targeting central banks now publish "fan charts" that explicitly indicate the likely margin of error. Second, these are not staff forecasts, but forecasts underwritten by those who make policy decisions. The distinction is important because such a practice rules out deniability: policymakers take personal responsibility for the forecasts upon which they base their actions and give up the possibility of blaming their staffs for incorrect forecasts that led to incorrect decisions. This is the condition for inflation targeting to be credible and therefore useful; deniability undermines the logic of inflation targeting.

If, for instance, the forecasts exceed the target, the presumption is that the central bank will raise the interest rate. Two important issues arise here. To start with, the interest rate is the instrument chosen by the central bank. This contrasts with the monetary aggregate instrument. Thus inflation targeting differs from monetary targeting, a strategy that was once the hallmark of the Bundesbank but has been universally abandoned in the 1980s, *de facto* if not *de jure*, by the Bundesbank. The many reasons for this evolution are presented in the next section. The other important issue is that central banks can only control very short term interest rates (from overnight to, say, three months). This is why the policy instrument is the very short term interest rate. Yet, in most countries, the very short term interest rate has virtually no impact on inflation. It only matters because it affects other key variables (long term rates, the exchange rate, asset prices) that are set by the corresponding markets. The importance of this issue is explained in Section 0 below.

The two to three year horizon is justified by the slow impact of monetary policy. It also explains why all inflation targeting central banks follow a flexible strategy. The current situation offers a good example of what is at stake. We now face high inflation rates. Should the ECB and other central banks abruptly raise their interest rates? Obviously, this is not what they are doing. One reason is that current forecasts anticipate a reflux of inflation. Another reason is more subtle. It can very well be that current expectations that inflation will decline will turn out to have been misguided.

There may be more oil and primary commodity price increases or the dreaded second round effects can materialize, at least more strongly than currently anticipated.

Assume, then, that inflation is in fact expected to remain high over the next two to three years. This would call for interest rate hikes, but how much and when? There are many ways of returning inflation to its target over the chosen horizon. Strict inflation targeting would indeed call for a forceful increase in the interest rate designed to lower inflation as soon as possible. As the figure below shows, an alternative is to gradually tame inflation. The advantage of the flexible path is that, in terms of growth and employment, the cost of reducing inflation is smaller. Flexible inflation targeting, the norm among central banks, exploits the length of the horizon to achieve the same inflation rate while taking into account other considerations. The main “other consideration” is growth and employment, but asset prices or exchange rates can also be factored in, and often are even though few central banks would admit to it.



What is the ECB’s strategy?

The ECB strongly denies that it is an inflation targeter. Yet, many studies have shown that its behaviour is not distinguishable from a flexible inflation targeting central bank.⁴⁶ This is why it is now common wisdom to note that the ECB’s deeds and words do not match. In this section I ask why does it act this way. In the following section I examine what are the implications.

The Bundesbank inheritance

From the start, the European Monetary Institute first, and the ECB next, have sought to establish continuity with the Bundesbank, arguably one of the world’s most successful central banks. In the 1970s, the Bundesbank had developed the monetary targeting strategy, which has been adopted by several other leading central banks, notably Paul Volcker’s Fed in 1981. The logic behind the monetary targeting strategy is the empirical observation that inflation rates follow money growth rates with a lag of one to two years.

⁴⁶ Some evidence has been previously presented to the Committee for Economic and Monetary Affairs in my Briefing Notes of the Second Quarter in 2006.

The Bundesbank concluded that “money causes inflation” and that, by controlling money growth it would control inflation.

The link between money growth and inflation has been known for a very long time. It has been formalized as the Cambridge equation:

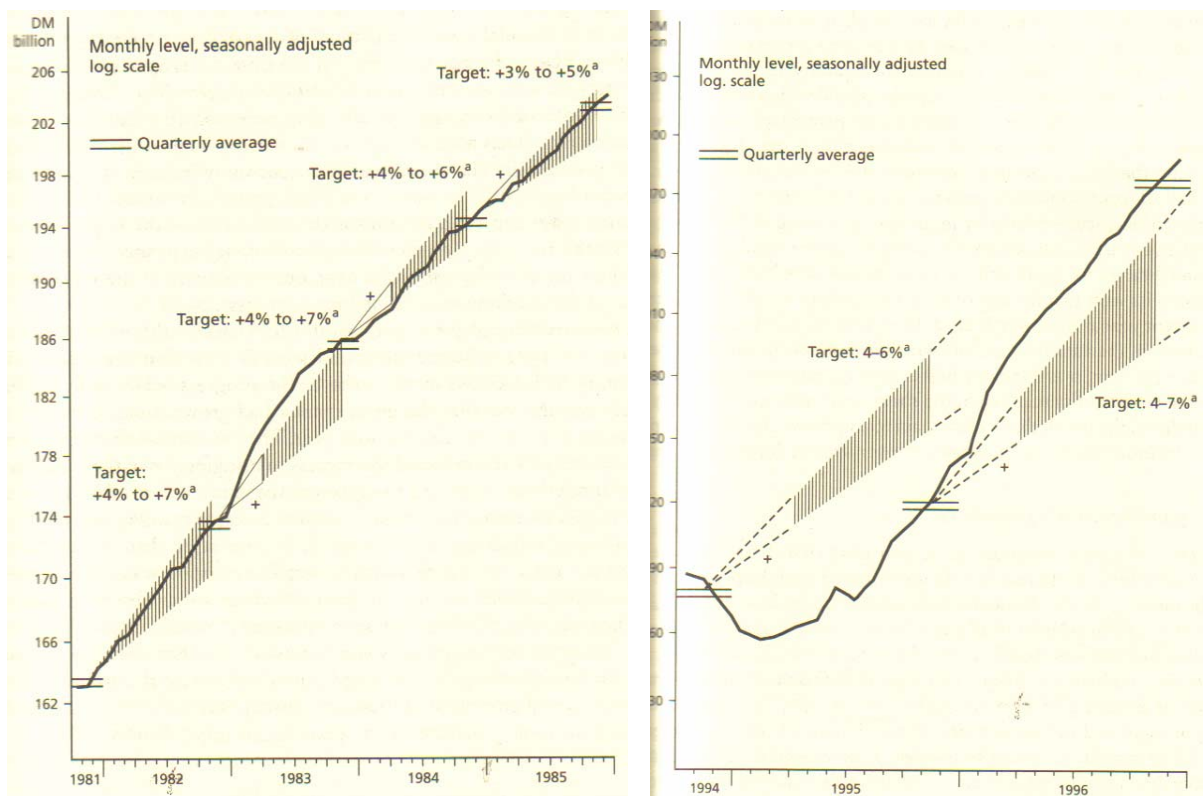
$$\frac{M}{P} = ky,$$

where M is the nominal money supply, P the price level, y real GDP and k a (presumably) constant term. Under the assumption that, in the long run, GDP growth is independent of money growth, an assumption essentially unchallenged to this day, it follows that ky is independent of what the central bank does. Then the real money stock M/P too is independent of monetary policy and, therefore, whatever happens to M is entirely absorbed by P : the faster M is allowed to grow, the faster must P grow.

This reasoning has been challenged in two main ways. First, it has long been recognized that, in the short run, money growth affects GDP growth. This observation implies that monetary policy can be used to counteract business cycles. Yet, in the longer run, this effect vanishes and therefore it makes sense to require that central banks focus primarily on long run inflation. Yet, modern central banks are asked to deliver price stability in the long run, while being sensitive to the shorter run cyclical effects of monetary policy; this is the logic of flexible inflation targeting.

The second challenge to monetary targeting concerns the stability of parameter k . This parameter captures how the private sector’s need for money evolves when real GDP rises. As long as k is constant, or changes in a predictable way, central banks can use money growth (the increase in M) to predictably affect inflation (the increase in P). Starting in the 1980s, innovations in the banking and financial sectors have made k quite unstable and unpredictable – to this day, its behaviour remains partly unexplained. In this situation, M/P itself is unstable and unpredictable and therefore controlling M does not allow to control P precisely enough. As is well known, the Bundesbank has ceased to effectively follow the monetary targeting strategy, although it continued to claim until 1999 that its strategy had remained unchanged. The two charts below illustrate why observers thought differently. The left-hand chart shows the money growth rate and its annual targets during the early and mid 1980s, at the heyday of the strategy. By and large, money growth behaved as targeted. Targets started to be systematically missed since the late 1980s. This is documented for the period 1995-6 in the left-hand chart. The Bundesbank then resorted to “special factors” to explain why the targets were missed year after year, in spite of being constantly rebased and changed. The “special factors” were mirrored by changes in k .⁴⁷ In the end, the Bundesbank quietly chose to act sensibly rather than to follow a rule that had become impractical. Only its rhetoric remains unchanged.

⁴⁷ Misses were even bigger in the early 1990s, partly due to unification.



Source: Ernst Baltensperger, "Monetary Policy under Conditions of Increasing Integration (1979-96)", in: Bundesbank (ed.) *Fifty Years of the Deutsche Mark*, Oxford University Press, 1999.

The ECB has followed the same practice. As is well known, it has systematically missed its money growth reference rate and it explains the outcome away by appealing to special circumstances. The situation had become so embarrassing that, in 2003, the first pillar (money growth) was demoted to second pillar status.

The first pillar

The new first pillar, economic analysis, is described by the ECB as follows:

"The economic analysis assesses the short to medium-term determinants of price developments. The focus is on real activity and financial conditions in the economy. The economic analysis takes account of the fact that price developments over those horizons are influenced largely by the interplay of supply and demand in the goods, services and factor markets."

In addition, the ECB explicitly says that this analysis is used to set the interest rate, not the money growth rate.

This is almost identical to what inflation-targeting central banks do. The main difference is that they rely on forecasts of inflation and output, but these forecasts are obtained as a result of an economic analysis virtually identical to the ECB's first pillar. Other differences are described in the next section.

Cross checking

Since 2003, the second pillar, monetary analysis is officially meant to “cross check” the conclusions of the economic analysis. Other central banks simply include monetary analysis as part of economic analysis. Why, then, does the ECB wish to attribute a special role to its otherwise standard monetary analysis. The best explanation, so far, has been proposed by Beck and Wieland (2007).⁴⁸ They explain that many variables used in the economic analysis – notably the all-important output gap – are hard to measure accurately so that important errors can be made. Cross-checking with the monetary analysis, they explain, is a way of catching up these errors early on.

There is no doubt that many important variables are poorly measured and that errors can be made, with detrimental effects on policy decisions. Yet, the Beck and Wieland interpretation, which seems to faithfully represent the ECB's own views, is unconvincing for the following reasons:

- The money stock is precisely measured but its implication for inflation requires assuming that k is stable or, at least, more reliable than the other variables that are poorly measured. There is no evidence that this is the case. The cross-checks are as imprecise as the variables that they are meant to complement.
- No reason is given as to why the money stock is a better indicator for cross-checking than the other variables (industrial production, employment, orders, the exchange rate, etc.) that other central banks routinely examine and use for their own cross-checking exercise.
- There is no explanation of how cross-checking is done. What if the monetary analysis leads to conclusions that sharply differ from those suggested by all other indicators? Apparently, the ECB mostly ignores its monetary analysis. Otherwise, the reference target would not systematically missed.
- The normal practice, in fact the optimal practice, is to use all available indicators and weigh them according to the confidence one has about their usefulness for predicting inflation. The special role attributed to money, a pillar in its own right, is unjustified by its poor predictive power.

Causality

Do the previous arguments imply that the Cambridge equation, and monetary analysis more broadly, is useless? Not at all. Any information is useful in its own right, but the use that one wishes to make of information requires careful thinking. The Cambridge equation is a concise and efficient way of stating that money growth and inflation are intimately linked. Fluctuations in k notwithstanding, this linkage remains as important as ever. What is at stake is not the linkage itself, but its usefulness for monetary policy decisions.

As noted before, fluctuations in k imply that money targeting is a poor way of controlling inflation. This is why the monetary pillar has lost much of its usefulness.

In addition, the linkage does not assert causality, as claimed by money growth targeting advocates. That M/P is unaffected by monetary policy in the long run does not mean the money growth causes inflation any more that it implies that inflation causes money growth.

⁴⁸ Guenter W. Beck and Volker Wieland, “Money in Monetary Policy Design: A Formal Characterization of ECB-Style Cross-Checking” *Journal of the European Economic Association*, April-May 2007, Vol 5, No 2-3.

It only says that money growth and inflation move roughly together in the long run, up to the effects of fluctuations in k . In fact, evidence provided by Gerlach (2003) suggests that inflation now causes money growth, in contrast to what was the case in the 1970s and 1980s.⁴⁹ The interpretation of this finding is simple: like any inflation targeting central bank, the ECB controls inflation through its interest rate policy, which in turns determines money growth via the Cambridge equation.

Drawbacks of the ECB strategy

The conclusion so far is that the ECB is a closet inflation targeter. Is it as good as being an explicit inflation targeter? Unfortunately not. With the two-pillar strategy, the ECB cannot explain clearly its true strategy. The cost of this source of opacity is that its actions are difficult to predict over the relevant horizon of one year or two.

This is a serious cost. Indeed, one of the key lessons learned in recent years, is that inflation is largely driven by expectations of where it is heading. When the central bank can indicate its intentions, and when these intentions are consistent with the price stability objective, monetary policy effectiveness is greatly enhanced. In term of the figure presented in Section 0, a predictable central bank can achieve fast deflation (the path indicated as “strict” in the figure) with limited output decline (the path indicated as “flexible” in the figure).

As an indication of how important this observation is, consider the events of the period of inflation tightening that started at the end of 2006.⁵⁰ Initially, financial markets appeared to seriously underestimate how quickly and how far the ECB would raise its interest rates. In fact, market expectations of where the three-month EURIBOR would be in June 2007 initially declined to as low as 2.5%. As the ECB raised its rates, expectations subsequently increased and gradually converged to the rate eventually reached (4.15%) in June 2007. Until the end, though, the markets never correctly anticipated what the end-point of the tightening would be. Had the ECB’s intentions been better understood, monetary conditions would have been less expansionary and inflation would have been lower, even with the same path of interest rate decisions.

The ECB insists that its decisions are perfectly foreseen by the markets. Indeed, it goes to great lengths to pre-announce its next move. This does not mean, however, that the markets can foresee further moves. As indicated above, they did not over the last two years. The problem is that the next policy move – 0.25% up or down, or not – has barely any effect on the economy and inflation. What matters is what will happen over the whole course during the next two or three years. A clear strategy, with words that match deeds, is a necessary condition for markets to correctly foresee future decisions. Stuck with the outdated two-pillar strategy, the ECB cannot explain its strategy at the relevant horizon.

⁴⁹ Stefan Gerlach, “The ECB’S Two Pillars”, CEPR Discussion Paper No.3689, 2003.

⁵⁰ This example is drawn from Francesco Giavazzi, Petra Geraats and Charles Wyplosz, “Transparency and Governance”, *Monitoring the European Central Bank* 6, CEPR 2008.

Next steps for the ECB

The costs of the monetary policy strategy are impossible to assess. They are probably not huge, but significant. It may have made sense for the new-born and untested ECB to initially present itself as the successor of the almighty Bundesbank. Nearly ten years onward, the ECB is now a mature institution with a better track record than that of the Bundesbank as far as inflation is concerned. There is no reason to retain a strategy designed in the 1970s when so much progress has been achieved since then, both in our understanding of the inflation phenomenon and in central banking practice.

The ECB can, and should, immediately adopt the flexible inflation strategy. It is fully compatible with its mandate. It has the required instruments, in fact it comes close to doing it. Beyond announcing the change in strategy, the ECB would have to do the following:

- It would have to announce an inflation target. The “less but close to 2%” definition of price stability is unsuited for a numerical target. In doing so, it would be well advised to raise somewhat the target – say from 1 to 3% - to acknowledge that it has been unable to keep inflation below 2% for nearly all of its now substantial history.
- It would have to specify the horizon over which it plans policy. Currently, the ECB refers to the “medium run”. This is a concept far too vague to be operational.
- It would have to publish the inflation and growth rate forecasts of its Board of Governors, since this is what must be compared to the target. Currently, it only publishes staff “projections”, even refusing to call them forecasts. The ECB might argue that the Board does not have a forecast over two to three years. The answer is that each of its members should have one, otherwise they are driving blindfolded. How to present *the* Board forecast is a matter for discussion, with much experience to draw upon. The Bank of England’s MPC, for example, agree on a path for output and inflation. The Fed’s FOMC now publishes the average forecasts of its members along with the highs and the lows across all members.
- The ECB should then relate its interest decisions to the forecasts. It would have to explain the coherence between its choices and the forecasts.
- Ideally, for consistency reason, it should also publish the interest rate forecasts of its Board. Indeed, the inflation and output forecasts are made under some assumption about what the central bank will decide in the future. The assumption must be what the Board believes it will do.⁵¹

⁵¹ This issue is slightly technical. It is developed in Francesco Giavazzi, Petra Geraats and Charles Wyplosz, “Transparency and Governance”, *Monitoring the European Central Bank* 6, CEPR 2008.