Mario Draghi: Monetary policy, expectations and financial markets

Text of the Central Bank Whitaker Lecture by Mr Mario Draghi, Governor of the Bank of Italy, Dublin, 18 July 2008.

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How central banks can motivate their decisions and communicate them clearly, completely and effectively is a significant aspect of monetary policy-making. This is not a new issue, but recent developments have raised pressing new policy questions.

Communicating monetary policy has become an even more challenging task in the current context of rising inflationary pressures, uncertain economic outlook and fragile financial markets. The expansionary monetary policies adopted in the past, together with severe structural tensions in the oil market, may have played a part in the present difficulties.

My aim today is, first, to review the evolution of central bank communication in a longer-term perspective and examine the benefits of transparency, in particular for the euro area. I will then address the implications of the two crucial aspects of monetary policy that we must tackle at the current juncture, namely the interaction between monetary policy, inflation expectations and the surge in oil prices, and the communication and transparency challenges posed by the financial market turmoil.

1. The road to better central bank communication: a historical perspective

Until the late 1980s, the conventional wisdom was that to be effective, policy decisions should not be anticipated. An opaque and convoluted language was considered appropriate. Today, that view has been superseded, and openness and clarity in central banks' communication are now considered mandatory.

The change has been radical. Perhaps the key event was the move towards a clear definition of policy goals, which began in the 1970s when a number of central banks adopted explicit monetary targets.

Awareness of the importance of policy commitment and good communication in curbing inflationary pressures was an essential ingredient of this strategy. As Paolo Baffi argued when he was Governor of the Bank of Italy, with the advent of monetary targets "the actions of central banks are no longer cloaked in silence, and perhaps never will be again. Whereas in the past silence was seen as a guarantee of independence, today this is achieved by giving an explicit account of one's actions".[1]

This trend continued with the widespread adoption of quantitative targets for price stability, including, in a number of countries, a specified inflation target. A study by the Bank of England found that in the late 1990s 83 central banks out of 94 surveyed had a definite target, either for the exchange rate, for money supply, or for inflation.[2]

Monetary authorities produce and release a vast amount of information: most central banks publish macroeconomic projections and specify the models on which they are based. For example, the ECB publishes the projections prepared by the Eurosystem and ECB staff four times a year. The Federal Reserve has been publishing its FOMC macroeconomic forecasts

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[1] Banca d'Italia, *Annual Report for 1978, 1979*, p.158.

[2] Fry, M., D. Julius, L. Mahadeva, S. Roger and G. Sterne, "Key issues in the choice of monetary policy framework", in L. Mahadeva and G. Sterne (eds.), Monetary Policy Frameworks in a Global Context, Routledge, London, 2000, pp. 1-216.

for three decades now; it has recently extended the horizon and increased the frequency of the forecasts.

Information has also become more timely. Central banks now inform the public as soon as a decision is taken, in press conferences or by releasing the minutes of meetings. The ECB publishes the motivations of the Governing Council's decisions the day of its policy meeting, and a press conference by the President adds further clarifications. Only a few years ago things were very different. For example, until 1994 the Federal Reserve did not disclose its interest-rate decisions, which investors had to infer from open-market operations.

In their statements, most central banks provide commentaries about future policy, although practices differ. Some of them offer only qualitative guidance. From 2000 to 2003 the Fed gave indications of the "balance of risks"; the ECB, when appropriate, gives signals through its communication channels. Other central banks have gone further in this direction, accompanying their macroeconomic projections with an explicit forecast of the future path of policy rates.

Not only does transparency on objectives, strategies, analyses and decisions ensure the democratic legitimacy of independent monetary authorities, it improves central banks' ability to attain their final goals, by shaping price-setters' expectations and attenuating the cost, in terms of lost output, of keeping inflation in check. It also enhances the effectiveness of monetary policy. Central banks directly control very-short-term interest rates, but most decisions within the economy are affected by longer-term rates, which in turn depend on expectations about monetary policy. As Michael Woodford has observed, "not only do expectations about policy matter, but, at least under current conditions, very little else matters".[3]

In the euro area, the need for clear communication is heightened by the multilingual and multicultural environment. Consistent interpretation of the ECB's decisions by the various national audiences requires the establishment of common terms of reference and their adaptation to the specific national contexts. The national central banks play a key role.

However, we should not conclude from this that we now have a common paradigm covering every aspect of central bank communication. In fact, no consensus has yet emerged among academics or central bankers on the ideal communication strategy. On the practice of publishing the projected path for interest rates, for instance, some studies cite the risk that the private sector could give too much weight to central bank information and accordingly under-invest in independent analysis of its own.[4]

Research at the Bank of Italy shows that when central banks release their projected path for interest rates, market participants understand well the information it contains. However, central banks seem to communicate effectively even when they disseminate qualitative information only.[5]

The existence of different views should not come as a surprise, as the "best practice" is likely to depend in part on the institutional, cultural and economic environment, so that central banks are required to adopt different communication strategies. For example, so far only relatively small countries seem to follow the practice of communicating projected policy rates, possibly because their close dependence on external conditions may make it easier to convey the conditional nature of their projections. As Lucas Papademos pointed out recently,

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[3] M. Woodford, *Interest and Prices*, Princeton University Press, 2003.

[4] See J.D. Morris and H. S. Shin, "Social Value of Public Information", 2002, *The American Economic Review*, and, on the empirical relevance of the argument, L.E. Svensson, "Social Value of Public Information is actually pro transparency", 2005, *NBER working paper 11537*.

[5] G. Ferrero and A. Secchi, "The Announcement of Future Policy Intentions", 2008, Bank of Italy, *Working Paper Series*, forthcoming.

there is no single recipe for every detail,[6] although good communication is now an essential component of any central bank's toolkit.[7]

2. Central bank communication, inflation expectations and commodity prices

The sweeping changes I have just described, and their lasting effect on the dynamics of inflation, must be taken into account in assessing policy at the current juncture, when, driven primarily by oil and food prices, inflation in the euro area is about 4 per cent, a level unseen since the early 1990s.

In the past two decades, innovation in monetary policy design and communication has helped to reduce the level and volatility of inflation, while the low level of real interest rates has stimulated employment and growth. Inflation expectations are better anchored today than in decades past, as both survey data and financial market indicators show. Moreover, long-run expectations appear more firmly anchored in countries where the monetary policy target is specified more clearly. For example in the euro area – where price stability is clearly and quantitatively defined – there is evidence that macro-economic news reports affect short-term inflation expectations, whereas elsewhere they also affect long-term expectations.[8]

Some questions concerning the link between monetary policy, inflation expectations and actual inflation remain open.[9] It would be good to have more information on how aggregate inflation expectations affect pricing behaviour at the micro level. Also, while we have many gauges of the inflation expectations of households, professional economists and financial markets, there is still little information on the expectations of the price-setters themselves (such as businesses).

In any case, the short-run trade-off between inflation and the stabilization of real economic activity seems to have improved significantly. Communication has certainly been a key factor. However, a successful communication strategy requires a central bank to be credible. And this, in turn, means matching words with deeds.

Our success to date in controlling inflation expectations depends crucially on the lessons we learnt from the oil price shocks of the 1970s. Central banks must now avoid the mistakes that were made then in a number of countries. Indeed, the experience with oil shocks over the last few decades provides a striking demonstration of the benefits of credible monetary policy, even in the current juncture. There is by now ample international evidence that the adverse effects of oil price shocks on the economy are significantly less severe than they were 30 years ago.[10]

This result undoubtedly reflects structural changes in the economy, such as greater energy efficiency in production and consumption and more flexible labour markets. The empirical evidence also suggests, however, that the enhanced credibility and the greater transparency of monetary policy have been key in cushioning the inflationary impact of oil shocks.

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6 L. Papademos, "Monetary policy communication and effectiveness", speech at the Annual Meeting of the Allied Social Science Associations, New Orleans, 5 January 2008.

7 A. S. Blinder, "Talking about Monetary Policy: The Virtues (and Vices) of Central Bank Communication", presented at the 7th BIS Annual Conference, Lucerne, 26-27 June 2008.

8 M.J. Beechey, B.K. Johannsen and A. Levin, "Are Long-run Inflation Expectations Anchored More Firmly in the Euro Area than in the United States?", *CEPR Discussion Paper No. 6536*, 2007.

9 See for example B. S. Bernanke (2008), "Outstanding Issues in the Analysis of Inflation", speech at the Federal Reserve Bank of Boston's 53rd Annual Economic Conference, Chatham, Massachusetts.

10 See, for example, O. Blanchard and J. Galì, "The Macroeconomic Effects of Oil Prices: Why Are the 2000s so Different from the 1970s?", *NBER Working PaperNo. 13368*.

Our research shows that even in the past the impact was smaller in countries where the central bank had a clear commitment to price stability and enjoyed high credibility. For example, estimates indicate that in the 1970s and 1980s it was about six times smaller in Germany than in Italy. And in Italy the transmission of oil price shocks to inflation has decreased further since 1999, thanks to the credibility of the Eurosystem monetary strategy. According to recent results, moreover, the diminished impact of oil price shocks on inflation and output is due in part to investors' better awareness of monetary policy-makers' anti-inflationary orientation or, to put it differently, the credibility of central banks.[11]

These considerations underpin the recent decision of the Governing Council of the ECB. Our forecasts indicated that the increase in inflation would be temporary, but it now looks more persistent than we expected a few months ago. Whereas in past months spill-over effects had been modest and underlying inflation had remained subdued, lately the risks have increased. There are signs of an acceleration in internal costs of production, and measures of medium- to longer-term inflation expectations also now indicate tensions.

It was to address the increased risk of second-round effects on wage and price setting and to reaffirm a commitment to restoring price stability that the Governing Council decided on 3 July to raise rates to 4.25 per cent. Credibility cannot be taken for granted, a sort of once-and-for-all acquisition. A timely move, instrumental in keeping inflation expectations under control, is certainly preferable to the late, violent corrections many countries experienced decades ago. Indeed, in the days following the rate hike, inflation expectations as derived from the financial markets stopped rising.

Policy-makers worldwide need to take good note of these lessons from the past. Expansionary global monetary policies may have accentuated the structural tensions within the oil market. A number of emerging countries are currently experiencing rapid and increasing inflation. In part this reflects the heavy incidence of food in their consumer-price indices, but in many cases it also derives from loose monetary conditions due to such factors as fast growth of money and credit aggregates and the choice of the exchange rate regime. These developments are impacting on inflation at the global level and call for appropriate policy measures. The credibility of monetary policy needs to be preserved in the advanced countries and pursued in the emerging countries, by heightening awareness of the seriously worsening risk of inflation.

3. Lessons from the financial market turmoil

The link between monetary policy, communication and the financial markets has also gained importance.

Now that financial markets are becoming increasingly efficient and complete, the transmission of monetary policy impulses to the economy is swifter than it was before and has come to depend more heavily on the way the financial markets perceive central bank decisions. Actual and expected changes in official rates are now rapidly transmitted to a wider range of financial assets and on to consumption and investment. The management of expectations is essential, as the release of information that diverges from market views may increase volatility and, in extreme cases, lead to an unwinding of large positions, with potentially disorderly effects on liquidity and asset prices.

Against this background, the financial turmoil has raised new issues for monetary policy-makers. It is now more difficult to forecast economic developments and to assess the effects of policy decisions and communication on markets, on expectations and, ultimately, on the real economy.

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[11] See O. Blanchard and J. Galì, *cit*.

The consequences of the recent events for prudential regulation and financial supervision have been examined in the Financial Stability Forum report "Enhancing Market and Institutional Resilience". I will not dwell on these issues today, but instead focus on the lessons most directly relevant to monetary policy design and communication.

A first lesson concerns the role of the monetary authorities in signalling the risks to financial stability. Independent central banks, with their sound reputation, their strong technical skills, and their medium- to long-term perspective, are in the ideal position to assess systemic risks emerging from financial markets and communicate them credibly to the public. Nevertheless, the markets have apparently failed to heed our warnings sufficiently, in this crisis as in past episodes.

To many of us, last year's crisis did not come as a surprise. In June 2007, in a speech at the Central Bank of Argentina, I myself expressed concern that the risk of a broader shock, resulting from a widespread decline in the appetite for risk, had increased. I warned that if the initial price movements were to trigger counterparty concerns, this might easily generate deeper and more broad-based liquidity erosions, posing systemic risks.[12] Other central banks and international institutions had issued analogous warnings, some of them even earlier.[13]

Why do markets trust central banks on monetary policy, while they seem to ignore the signals provided repeatedly by monetary authorities on financial stability? One possibility, of course, strictly related to human psychology, is that after a protracted period of favourable macroeconomic conditions investors may become over-optimistic and underestimate risks.

But it is equally possible that, as in monetary policy-making, here too effective communication requires words to be followed by deeds. This objective may necessitate wide-ranging changes in regulations, supervisory practices and central bank responsibilities.

The turmoil has shown that international coordination is essential to make private institutions more transparent and avoid the potentially destabilizing effects of the perverse incentives that prevail in some segments of the financial system.

As for central banks, it has been maintained that if they are to be as credible when they comment on financial risks as they are in monetary policy, they need to be more closely involved in the task of ensuring financial stability; in some cases this may mean reinforcing their statutory responsibilities.[14] We should also assess carefully whether the instruments currently available to central banks to preserve financial stability – for example by attenuating the pro-cyclical nature of financial markets – are adequate to this formidable task; and whether it might be possible to overcome economic and political resistance to the idea of enlarging the central banks' role in defending financial stability.

But preserving financial stability may also have implications for the conduct of monetary policy. Indeed, the link between monetary policy and financial stability poses a challenge to central bankers. We must seriously reconsider what was until recently a widely held view, namely that monetary policy should play a passive role as financial imbalances are building up and should only intervene after the crash, injecting liquidity to avoid a macroeconomic meltdown (known as mopping up after the event). We should assess whether and how far our policy instruments should also be used to "lean against the wind" to contain financial disequilibria and avoid perverse incentives and an asymmetric expansionary bias in investors' perception of monetary policy.

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[12] M. Draghi, "Monetary policy and new financial instruments", Buenos Aires, 4 June 2007.

[13] See, for example, the press release of the Financial Stability Forum's seventeenth meeting in Frankfurt, 29 March 2007.

[14] See, for example, the Report of the Paulson Committee on Capital Market Regulation.

Of course, it is extremely difficult to define the meaning of "disequilibria" in this area and to design a policy that will mitigate the risks of financial imbalances and crises while ensuring the preservation of price stability. While we should probably avoid asking too much of monetary policy, we cannot ignore that excessively low interest rates and over-expansion of liquidity and credit can affect the financial industry by encouraging investors' risk-taking behaviour. This implies that monetary and credit developments should be central in the communication of our strategy.[15] The turmoil has confirmed that the ECB's strategic emphasis on money and credit developments is appropriate.

The second lesson we have drawn from the crisis is that to reap the full benefits of central bank transparency, the financial sector at large – financial institutions, financial instruments, and market behaviour – must also be transparent.

First of all, a clear understanding of financial conditions is essential for policy decisions, since variables such as the leverage of the private sector, the distribution of debt and the riskiness of banks affect the transmission of monetary policy.

Moreover, when financial instruments are highly complex, the balance sheets of financial institutions may be so opaque that outsiders – central banks, supervisors and even shareholders – may fail to perceive the true degree of risk in the system and so react tardily to financial imbalances. It is even possible that a better predictability of central banks' actions – concerning the future path of policy rates or their reactions in a crisis – coupled with the perverse incentives for risk prevailing in some segments of the financial system, might encourage risk-taking by private investors.

In order to arrive at first-best solutions and improve the system's stability, progress in central bank transparency must be accompanied by regulatory and supervisory action to make the financial services industry less opaque. Indeed, there is an urgent need for greater transparency in this sector, not only to improve the world financial system's resilience, but also to ensure that the stance of monetary policy is consistent with both price and financial stability.

The FSF Report encourages financial institutions to enhance their transparency already in their 2008 mid-year reports and to improve reporting standards for off-balance-sheet vehicles. The credit rating agencies also play a crucial role in this context, and the Report has indicated several measures to improve their performance.

The third lesson we have learnt from the turmoil is that when tensions arise and markets become illiquid, central banks may have to take care in explaining how they intend to act to maintain price stability while preserving orderly conditions on financial markets. This problem is likely to arise in particular on the money market, whose functioning is crucial to the liquidity of securities markets in general.

In times of great uncertainty, monetary policy has to be perceived as a stabilizing force, providing a solid anchor to inflation expectations. When there are money-market strains, distinguishing between liquidity provision and the reasons underpinning the setting of policy rates, easy enough in normal circumstances, becomes difficult, but remains nonetheless essential. On the one hand, the actions needed to restore market liquidity may blur monetary policy signals; on the other, decisions on interest rates could be interpreted as revealing information unknown to the market, thus exacerbating tensions.

In these circumstances, it is important to make sure that more active liquidity management by the central bank, which is necessary to ease tensions in the money market, is not perceived as a signal of a looser commitment to price stability.

[15] See the considerations in O. Issing, "In search of monetary stability: the evolution of monetary policy", presented at the 7th BIS annual conference, June 2008.

During the recent turmoil, the policy actions and the communication of the Eurosystem have carefully distinguished the operations needed to support the money market from genuine monetary policy decisions. Since August 2007, the Eurosystem has repeatedly injected funds into the money market through both MROs and longer-term operations, in order to serve banks' demand for liquidity. These operations have been accompanied by prompt communication – via press releases or other channels – to reassure the markets that the ECB stood ready to do what was needed to guarantee the orderly functioning of the interbank market and to reduce the volatility of very-short-term rates. At the same time, the Council has emphasized its determination to ensure that risks to price stability over the medium term do not materialize and to keep inflation expectations consistent with price stability.

These events have demonstrated that central banks, and the ECB in particular, are well-equipped to handle these problems. Central bank interventions have been effective in avoiding market disruptions, although on longer money-market maturities a substantial premium over official rates has emerged. The turmoil has also shown that in times of stress central banks must be prepared to enhance communication with the markets and to adapt their operational framework to market conditions, taking innovative steps when needed.

The recent events have also raised a number of new questions concerning the design of these operations and their communication to the market. First of all, central banks must consider carefully how far they should go in devising new instruments to provide liquidity. In particular, at what conditions should non-deposit-taking institutions be eligible for refinancing operations?

Another problem is whether, and to what extent, the tools that are appropriate in emergencies should be announced in advance to the market or even used in normal situations. In order to address this issue, we need to analyse the trade-off between greater disclosure – which would acquaint the central bank's counterparties with the non-standard procedures, thus facilitating their use in case of need – and the danger of exacerbating moral hazard, encouraging further risk taking.

One more issue on which we need to reflect concerns the measures that serve to make recourse to these instruments less likely. For example, recent experience has made it evident that the characteristics of deposit insurance schemes are key to containing the risk of bank runs and liquidity crises.

The role of communication and the benefits of full transparency are also crucial in case of crisis. As the events of the past year have shown, the prompt public announcement by the central bank of interventions to support individual institutions may trigger herd behaviour and exacerbate liquidity problems. It is our communication that will induce either stigma or trust.

The need to reach a common understanding of these problems is particularly pressing at the moment. The central banks must intensify their cooperation in order to prevent liquidity crises and ensure a level playing field. Enhanced communication and collective monitoring of market developments, with coordinated steps to provide longer-term funds, is of the essence.