

Lorenzo Bini Smaghi: Lessons for monetary policy from the recent crisis

Speech by Mr Lorenzo Bini Smaghi, Member of the Executive Board of the European Central Bank, at the roundtable “L'euro e la crisi internazionale”, Milan, 19 January 2011.

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Introduction

The financial crisis has been a very challenging period for policy-makers worldwide, not least for monetary authorities. Central banks have lowered interest rates to levels close to zero and implemented a broad range of unprecedented non-standard policy measures.

The recent experience offers, I think, five lessons from which monetary policy-makers can learn. Let me list them upfront, before turning to each of them – in that order – in my remarks today.

1. Central bank independence remains critical to delivering price stability, particularly during crises.
2. A clearly defined objective of price stability is essential to firmly anchor inflation expectations, which can act as an automatic stabiliser during a crisis.
3. Monetary policy should be oriented to the medium term. Trying to fine-tune monetary policy on the basis of indicators, such as output gaps and measures of core inflation, which are either subject to ex post revisions or are misleading, may – and often does – induce an excess short-termism and entail serious risks.
4. Monetary and financial variables should be a key input in the assessment of medium to long-run risks to price stability, particularly during financial crises.
5. Finally, price stability and financial stability are complementary. The new macro-prudential function and monetary policy reinforce each other.

1. Central bank independence remains critical

The value of central bank independence is the first, lasting lesson. Of course, central bank independence is a *sine qua non* of effective monetary policy, at all times and under all possible circumstances. If a central bank is not independent, policy-makers from other quarters have strong incentives to pass on to the bank problems and responsibilities for which they, in fact, are to be held accountable. This – always – leads to a blurring of responsibilities and potentially to a loss of trust, which ultimately undermines the effectiveness of monetary policy.¹

But in times of crisis the value of independence rises even further. In perturbed market conditions central banks may have to implement extraordinary measures, both in terms of reducing policy rates to unprecedented levels, and in terms of unconventional liquidity measures. If these measures – untested as they are – are to be expected to exert any impact on economic decisions, they have to be seen by market participants as the result of an autonomous decision by the central bank. They ought to be seen as being consistent with its overall policy framework, rather than the result of pressures from the fiscal authorities. The reason is simple. If a central bank comes under pressure in times of crisis, and succumbs to that pressure, it is unlikely to behave differently in good times. Therefore, if the central bank

¹ See Kydland F. and E. Prescott (1977), “Rules Rather than Discretion: The Inconsistency of Optimal Plans”, *Journal of Political Economy*, 85, pp. 473–492; and Barro R. and D. Gordon (1983), “Rules, Discretion and Reputation in a Model of Monetary Policy”. *Journal of Monetary Economics*, 12, pp.101–121.

is externally constrained to take exceptional measures during a crisis, it will not be able to resist the same pressures when the crisis ends. This may disanchor inflation expectations and thus undermine the effectiveness of the measures implemented during the crisis.

The ECB has made no exception. The financial crisis that has shaken the global economy for two full years has meant that we had to explore new avenues of monetary policy intervention. We all had to experiment with new tools, as conventional instruments had been blunted and damaged to some extent by the financial collapse. True, the activation of new tools sometimes has brought us closer to the lines that separate the different spheres of policy-making responsibilities from each other – lines we previously considered as remote.

However, the fact that during a crisis the central bank broadens its range of tools does not imply that it is compromising its objective and its independence in pursuit of its mandate. In the case of the ECB, the institutional framework for the single monetary policy establishes the ECB's independence in choosing the instruments necessary to achieve its mandate of price stability. We cannot modify our mandate. But we can choose the instruments which, from time to time, we consider most efficient in attaining our objective. This is the essence of "instrument independence", a fundamental cornerstone of the contemporary theory and practice of central banking, and a critical precondition for central banks' success in taming inflation and keeping it low and stable over the last 30 years.

Because of the crucial role of banks in the real economy of the euro area, in the autumn of 2008 we started to provide liquidity in unlimited volumes and with longer maturities to banks. In June 2009 we launched a programme to purchase euro-denominated covered bonds issued by euro area resident banks. The aim was to jump-start this market, which represents the bright side of securitisation, and yet had suffered considerably in the crisis. By May 2010 persistent and excessive government borrowing and accounting frauds had unleashed a debt run on Greece. Market uncertainties had spread to other issuers and a localised loss of confidence had soon developed into a generalised market paralysis: a virtual seizing-up of the market for government paper, for any signature except the most credible.

In these conditions, the ECB decided to intervene again, through a new Securities Markets Programme. The purpose of these interventions was – and still is – genuinely a monetary policy one. The market for government paper plays a central role in the financial system of any developed economy, and constitutes a crucial link in the upstream portion of the transmission mechanism that channels monetary policy impulses to the real economy. This is due to the power of collateral in the contemporary financial world. The presence or absence of collateral in money market transactions, and the quality of the collateral used to secure money market transactions determine whether the transmission mechanism starts to function or is blocked, whether it is foreseeable and dependable, or uncertain and unreliable. The perceived quality of collateral influences the scale of market spreads over and above the overnight rate at which the central bank lends to banks. And money market spreads are the first asset prices whose orderly adjustment is so important in ensuring that the monetary policy intentions of a central bank are conveyed to the broad economy. In addition, one should not neglect the fact that government securities provide the basis on which all private debt instruments are priced.

I would take the argument one step further. I suggest that the central bank should use its independence to remind the other main policy actors at all times, even during crises, of their responsibilities. It should not act in a way which may create disincentives for the other authorities. The fiscal and supervisory authorities are key players. When implementing an accommodative policy in response to a potential seizing-up of financial markets, the central bank should not shy away from calling on the fiscal authority to implement a credible medium-term budgetary adjustment. I would even consider this to be a pre-condition for the central bank to enact such a policy. Otherwise the uncertainties surrounding the fiscal framework may contaminate monetary policy.

On a more general note, an accommodative liquidity policy entailing atypically low interest rates needs reinforcing safeguards. On the one hand, it needs to be accompanied by a healthy fiscal framework: such a framework removes one prime source of instability and – where instability persists nonetheless – it broadens the scope of action open to central banks.

This has been a key point for the ECB especially over the last 12 months and will continue to be in 2011. We have emphasised several times that it is the task of the political authorities to ensure a credible fiscal framework, composed of appropriate national budgetary programmes, a rigorous surveillance framework at the euro area level and a stable safety net underpinning the stability of the euro area economy.

The ECB has also repeatedly called on the governments of the Member States to make a leap forward in improving the institutional framework underlying the euro area. We have made concrete proposals over the last few months on ways to improve the fiscal and macroeconomic surveillance underlying the Stability and Growth Pact and to address crises, if they occur. A lot has been done but there is a need to complete this work, as we have stated recently, to protect the system against market instability. We have also repeatedly called for a timely consolidation of public finances, in contrast to some commentators and academics. Had this consolidation started earlier, rather than under the pressure of the markets, it would have been less painful.

The same pressure needs to be exerted on the supervisory and fiscal authorities in charge of ensuring the solvency of financial institutions. An unconditional supply of liquidity by the central bank to address systemic problems may create disincentives to recapitalise and restructure the fragile parts of the system, and thus delay the recovery. The provision of liquidity should thus be conducted in a way that maintains the incentives for financial institutions and supervisors to take all the necessary measures to restore normality as quickly as possible. This is why extraordinary measures have to be implemented within a framework which foresees a timely exit when conditions allow.

2. A clearly defined objective of price stability is essential

The second lesson taught by the crisis is that a clearly defined objective of price stability can act as an automatic stabiliser when uncertainty becomes destabilising. This is always true, in both good times and bad. In fact, well-anchored expectations in the euro area were instrumental in avoiding large interest rate hikes before the crisis, when commodity prices rose sharply. At the height of the crisis, however, they became a policy instrument in their own right. Thanks to well-anchored inflation expectations we were able to avoid deflationary spirals and reduce real interest rates in tandem with nominal rates. Note that if inflation expectations are well anchored, and impervious to transient shocks to actual inflation, there is no need to manipulate key parameters of the monetary policy frameworks, i.e. no need to increase the inflation target or to move to price level targeting in order to resist deflationary risks in times of macroeconomic distress.² Opportunistic manipulations of the monetary policy framework of course damage the foundations on which that framework rests. So, being able to rely on the rebalancing effect of inflation expectations is a superior option. But firmly anchored inflation expectations also make policy commitments unnecessary. These commitments concerning the future course of the policy rate are viewed as providing one effective instrument for introducing a stimulus when the room for reducing the nominal interest rate is exhausted. But they come at a price. Policy commitments cannot be effective unless they materially constrain future options. Again, being able to rely on firm inflation

² See Blanchard O., Dell’Ariccia G. and P. Mauro (2010), “Rethinking Macroeconomic Policy”, IMF Staff Position Note, No 10/03; and Svensson L. (2001), “The Zero Bound in an Open Economy: A Foolproof Way of Escaping from a Liquidity Trap”, *Monetary and Economic Studies*, 19, Bank of Japan, pp. 277–312.

expectations offers a way to reduce real rates and provide a stimulus without incurring the limitations of policy commitments.³

3. Monetary policy should be oriented to the medium term

The third lesson concerns the risks associated with a monetary policy aimed at fine-tuning short-term objectives. Experience, especially prior to the crisis, has revealed the risks of designing policy on indicators and variables which are not sufficiently robust. Let me give a couple of examples, starting with the output gap. As the literature has clearly shown, the empirical proxies used to capture the output gap are subject to constant revisions.⁴ There is evidence that for the period 2002–2004 the output gap estimates in the United States were *ex post* significantly smaller than the real-time estimates.⁵ Policy-makers who base their decisions mainly on such assessments of the cyclical position can be seriously led astray. The Great Inflation of the 1970s was, for instance, to a large extent due to measurement errors in the real-time estimates of the output gap combined with an overreaction to output gap measures when assessing the state of the economy.⁶ The same applies to the low interest rates implemented for a prolonged period in the middle of the last decade.⁷

Core inflation measures are another example. These can give misleading signals in the event of persistent changes to relative prices. This is not so much a lesson that we can learn from the crisis, but a phenomenon that the crisis has exposed as one of the main factors of the pre-crisis Great Moderation. Examples abound. For example, technological innovations concentrated in the production of the goods included in the core inflation basket can persistently push down selected prices. There is also evidence that globalisation has been depressing prices for core CPI products due to increased global competition in the tradable goods sector⁸, while at the same time prices for energy and food products have been pushed up by the demand of those emerging economies that were opening up to the global economy.⁹ In these conditions, too much emphasis on core inflation can distort policy inference. Core inflation can provide policy-makers with a downwardly biased assessment of overall price pressures and – mistakenly – suggest a pro-cyclical policy course.

In a globalised world, the destabilising mechanisms that such distortions of perspective can activate are manifold. Today increased trade and capital flows make monetary policy

³ See Eggertson G. and M. Woodford (2003), “The Zero Bound on Interest Rates and Optimal Monetary Policy,” *Brookings Papers on Economic Activity*, 34, pp. 139–211; and Walsh C. (2010), “Using Monetary Policy to Stabilize Economic Activity,” in *Financial Stability and Macroeconomic Policy*, 2009 Jackson Hole Symposium, Federal Reserve Bank of Kansas City, pp. 245–296.

⁴ See Orphanides A. and S. van Norden (2002), “The Unreliability of Output-Gap Estimates in Real Time,” *Review of Economics and Statistics* 84, pp. 569–583; and Orphanides A. and S. van Norden (2005), “The Reliability of Inflation Forecasts Based on Output Gap Estimates in Real Time,” *Journal of Money, Credit, and Banking*, 37, pp. 583–601.

⁵ See Bini Smaghi L. (2010), “Could monetary policy have helped prevent the financial crisis?,” Bank of Canada, Toronto 9 April 2010.

⁶ See ECB (2010), “The “Great Inflation”: Lessons for monetary policy”, *Monthly Bulletin*, May 2010; and Orphanides A., (2002), “Monetary Policy Rules and the Great Inflation,” *American Economic Review*, 92, pp. 115–120.

⁷ See Taylor J. (2007), “Housing and Monetary Policy,” in *Housing, Housing Finance, and Monetary Policy*, Proceedings of Federal Reserve Bank of Kansas City Symposium, Jackson Hole, Wyoming.

⁸ See Chen N., Imbs J. and A. Scott (2009), “The dynamics of trade and competition,” *Journal of International Economics*, 77, pp. 50–62.

⁹ See Rogoff K. (2006), “Impact of Globalization on Monetary Policy,” in *Federal Reserve Bank of Kansas City, The New Economic Geography: Effects and Policy Implications*, pp. 265–305; and Pain N., Koske I. and M. Sollie (2006), “Globalisation and Inflation in the OECD Economies,” *OECD Economics Department Working Paper*, No. 524.

decisions in systemically important countries tightly interact. In fact, monetary policy decisions in industrialised countries find in the exchange rate arrangements of important emerging market economies a potentially potent multiplier. For example, the currently accommodative monetary policy of industrialised countries generates more liquidity at the global level than if emerging market economies' currencies were free to float. Limits to the sterilisation of international capital inflows under currency pegs lead to generalised liquidity spillovers on a global scale. At the same time the accumulation of foreign reserves by emerging market economies leads to downward pressure on long-term interest rates in global economies. This, in turn, intensifies the trends in asset and commodity prices, thus potentially leading to further imbalances and global inflation. When setting their policies, monetary policy-makers in industrialised countries should take this dimension into account.

Monetary policies aimed at fine-tuning short-term objectives also run a serious risk that they will induce too much policy forbearance for too long. Exiting an extraordinarily accommodative mode too late can sow the seeds of future imbalances. As the economy recovers from an exceptionally deep recession, real-time output gap estimates and estimates of structural unemployment or the non-accelerating inflation rate of unemployment (NAIRU) are particularly uncertain. Structural unemployment is likely to have significantly risen because of the mismatch between the skills of workers that lose their jobs in sectors that are downsizing, and the skills of workers required in the expanding sectors of the economy. While emphasis on output gap measures can instil the conviction that unemployment could be reduced by monetary means, it becomes an illusion if the problem is due to a structural mismatch of skills or labour market imperfections. Structural policies are the only policy instrument that can address structural unemployment.

4. Monetary and financial variables are a key input in the assessment of price stability

The fourth lesson that I draw from these difficult times is that this crisis has certainly proved that the conventional wisdom of the last decade – that money does not matter, even for monetary policy – is wrong. I guess I do not need to emphasise this to alumni from the University of Chicago!

Money and credit aggregates *do* contain important information that allows policy-makers to overcome the pitfalls related to some economic indicators. When inflation is rendered dormant by a sequence of favourable supply side shocks, this creates an environment in which central banks might find it extremely difficult to raise interest rates, even if such a response were justified by bullish financial markets and by signs of economic overheating. In these conditions, incorporating monetary and financial imbalances in the policy process – whether in the form of a monetary pillar or in the form of a leaning-against-the-wind attitude – can help support a pre-emptive policy even in the face of subdued or falling inflation. The reason is simple. Monetary and credit imbalances which form alongside and – I would say – in symbiosis with an asset price trend indicate that price stability might be endangered over the medium term. Reacting to the monetary side of this symbiosis may prevent larger problems from occurring subsequently.¹⁰

In addition, monitoring credit growth can also be useful to identify other sources of unsustainable credit developments, even if some of them cannot necessarily be eliminated by monetary policy tools, and would instead require action of a macro-prudential nature. After years of forgetfulness, macroeconomic theory seems to have caught up with reality and

¹⁰ See Fahr S., Motto R., Rostagno M., Smets F. and O. Tristani (2010), "Lessons for monetary policy strategy from the recent past," paper presented at the 6th ECB Central Banking Conference, Frankfurt am Main, 18–19 November 2010.

shifted attention to credit and leverage as critical parameters that a central bank should consult regularly to measure the pulse of the economy.¹¹

The ECB consistently used these parameters even when they were derided as relics of a defunct monetary doctrine. They proved useful. They gave information about financing conditions and the financial structure, as well as about the condition and behaviour of banks, when these sources of information were critical to the assessment of the health of the transmission mechanism and, more broadly, the state of the business cycle. And this dimension of monetary analysis has proved particularly valuable in shaping the ECB's response to the financial crisis. There is indeed evidence for the euro area that without duly taking the monetary analysis into account, inflation in the euro area would have been distinctly higher at times of financial exuberance and would have fallen deep into negative territory in the wake of the financial market collapse, starting in the autumn of 2008. The economy as a whole would have been more volatile.¹²

On a more general note, by including monetary analysis in their monetary strategy, central banks can ensure that important information stemming from money and credit, typically neglected in conventional cyclical forecasting models of the economy, is considered in the formulation of monetary policy decisions. There is compelling empirical evidence showing that at low frequencies, that is over medium to longer-term horizons, inflation shows a robust positive association with monetary growth.¹³

5. Complementarity between price stability and financial stability

The fifth lesson from the financial crisis is that ensuring price stability is *not sufficient* for financial stability. To be sure, the conventional wisdom prevailing before the crisis was twofold. First, stabilising inflation would do the job. As inflation is – according to the pre-crisis consensus – a summary statistic for the state of the economy, for demand pressures, then any exuberance in financial markets would not be policy-relevant unless it exerts upward pressures on inflation. Second, and partly as a consequence, central banks should only pick up the pieces after the bubble has burst, and the costs of doing this relative to a policy of resisting the bubble while it is forming would not be large.

Both these prescriptions have turned out to be major mistakes. For one thing, inflation and financial exuberance are often negatively – not positively – correlated, so that concentrating a central bank on inflation only means biasing the assessment of the risks to the macro-economy from a longer-term perspective. And, cleaning up the economy in the wake of a financial collapse can be exceedingly costly. This raises the question of whether central banks should be given the task of ensuring both price stability *and* financial stability, and possibly given additional tools to do so.

The interlinkages between financial stability and price stability and between monetary policy and prudential supervision have become more evident as a result of the crisis. Monetary policy can affect systemic risk via a number of channels. First, being mandated to a price stability objective, a central bank sets in place the *necessary* conditions for financial stability.

¹¹ See Adrian T. and H. S. Shin, (2010), "Financial Intermediaries and Monetary Economics", Federal Reserve Bank of New York Staff Reports, No 398; and Brunnermeier M. and L. Pedersen (2010), "Market Liquidity and Funding Liquidity," *The Review of Financial Studies*, 22, pp. 2201–2238; and Geanakoplos J. (2010), "Solving the Present Crisis and Managing the Leverage Cycle," *Federal Reserve Bank of New York Economic Policy Review*, pp. 101–131.

¹² See Fahr S., Motto R., Rostagno M., Smets F. and O. Tristani (2010), "Lessons for monetary policy strategy from the recent past," paper presented at the 6th ECB Central Banking Conference, Frankfurt am Main, 18–19 November 2010.

¹³ See Benati L. (2009), "Long-run evidence on money growth and inflation", ECB Working Paper Series, No 1027.

Economic history tells us that without price stability financial stability is certainly absent. Either inflation hedging might take the most improvised and destabilising forms, or the central bank itself – going through cycles of go-stop policies – might become an independent source of macroeconomic instability and thus financial volatility. We all remember that a long span of time of unanchored inflation expectations and poor inflation records encouraged all sorts of self-made strategies of inflation hedging in the 1970s in many industrialised countries. Italy's housing market, for example, received a formidable boost from Italians' attempt to insure against sustained losses in purchasing power. But as soon as monetary policy in the 1980s changed paths and embarked on decisive stabilisation, and inflation risks subsided, house prices started to plummet, making the disinflationary recession more painful. So, lack of price stability generates financial volatility and financial volatility aggravates macroeconomic uncertainty.

A second channel through which monetary policy can contribute to financial stability is through its lender-of-last-resort function. When financial markets become dysfunctional and the monetary transmission channels are no longer working properly, monetary policy has a role to play in supporting the liquidity conditions of solvent and illiquid banks. I mentioned this before – when I described the ECB's reaction to the crisis.

Third, more recent analysis has drawn attention to a channel through which monetary policy might also – unintentionally – influence the perception of risk by financial markets and thus, ultimately, the assumption of risk by financial agents: the so-called risk-taking channel.¹⁴ Financial institutions apparently increase their leverage during booms and reduce it during recessions. Thus, contrary to common assumptions, financial institutions' leverage is pro-cyclical; the expansion and contraction of balance sheets amplifies, rather than counteracts, the credit cycle. Protracted loose monetary conditions can foster excessive risk-taking and, consequentially, produce a build-up of financial imbalances. If not accurately controlled, this channel can add to the pro-cyclicality of financial markets.

Now, you have two ways to counter financial pro-cyclicality. The first is through a monetary policy regime that is not centred exclusively on inflation, but leans against the wind of financial imbalances. What does this mean? It means, for example, implementing a tighter policy in the face of financial exuberance than would be justified by the same inflation outlook in more tranquil market conditions. It means tolerating a downdrift in inflation in exchange for some more insurance against greater and more disruptive risks to price and financial stability in the longer run.

The second way to counter financial pro-cyclicality is through macro-prudential supervision, a new perspective of macroeconomic control. Macro-prudential supervision aims to support the stability of the financial system as such and seeks to dampen its pro-cyclicality by eliciting regulatory and supervisory instruments. From the central bank's perspective, this implies that macro-prudential supervision is relevant to the extent that it has an impact on the functioning of the transmission mechanism through which a central bank seeks to influence the outlook for price stability.

It is clear that the two policies are complementary. But, does one of them make the other redundant? I don't think so. Let me advance my own view about the correct way to organise the interaction between the two. A leaning-against-the-wind approach in monetary policy prevents a risk-less interest rate – the floor to all borrowing costs in the economy – from becoming pro-cyclical. Macro-prudential policies make sure that the leverage that the economy creates at that floor interest rate and the spreads that are paid by risky borrowers

¹⁴ See Adrian T. and H. S. Shin, (2010), "Financial Intermediaries and Monetary Economics", Federal Reserve Bank of New York Staff Reports, No 398; and Maddaloni A. and J.-L. Peydró, "Bank Risk-Taking, Securitization, Supervision, and Low Interest Rates: Evidence from the Euro Area and U.S. Lending Standards", Review of Financial Studies, forthcoming.

over and above the floor interest rate set by the central bank do not become an additional pro-cyclical source of volatility for the financial system and the economy as a whole.

How about the other dimension of supervision: micro-prudential policies? Note, first, the difference between macro and micro. Macro-prudential supervision aims at limiting the likelihood of failure of significant portions of the financial system, or systemic risk. It follows that the macro-prudential supervision stresses the possibility that actions that may seem desirable or reasonable from the perspective of individual institutions may result in unwelcome system outcomes. Micro-prudential supervision, instead, aims at limiting the likelihood of failure of individual institutions. While the two policies have clearly a different scope, ultimately the micro-prudential sphere provides the instruments that can be activated in response to macro-prudential risks.

An issue which has attracted attention in the past is whether central banks should be entrusted with supervisory powers – the instruments – or whether those powers should remain within a separate body. My take on this dispute is the following. The experience of the crisis tends to suggest that having the micro and macro-prudential instruments well integrated among other functions within the central bank might be desirable.

Why? Because it always makes good sense to coordinate objectives with instruments. And it looks to me natural that such coordination might best be performed by the central bank. Independent bodies are better able to deal with the necessary exchange of information between the monetary and supervisory functions, and can build any Chinese wall between the two that may be needed to avoid conflicts of interest. Progress has been made since the eruption of the crisis in several countries, with the supervisory powers being transferred from a separate institution, which in many cases was insufficiently independent from the political authorities, to the central bank.

But organising the coordinating role in the euro area context remains a complex undertaking. This is due not only to the fact that, national supervisory authorities are sometimes part of the national central banks, while in other cases they are separate institutions. It is a complex environment because, even in a hypothetical situation in which all supervisory authorities were integrated in the central banks, this function would still be exercised at the level of the national jurisdiction. In other words, in a monetary union the need for coordination is twofold: coordination between the macro and the micro functions, and coordination between the authorities exercising the micro function locally.

Some progress has been achieved with the creation of the three European supervisory authorities (for banking, markets and insurance) and the European Systemic Risk Board, which comprises the central banks and the three European agencies. The ESRB will be able to make recommendations, while implementation remains the responsibility of the national authorities. This crisis has shown the need for more than just increased cooperation, but rather institutions able to take timely and effective decisions. This is the direction that European integration will have to take going forward.

I thank you for your attention.