

## **Lorenzo Bini Smaghi: The challenges facing monetary policy**

Speech by Mr Lorenzo Bini Smaghi, Member of the Executive Board of the European Central Bank, at Prometeia, Bologna, 27 January 2011.

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### **Introduction**

From the start of the crisis in summer 2007, monetary policy has faced a number of challenges, linked particularly to the interaction between the development of the real economy and the turbulence in the financial markets. This has forced central banks to operate not only by way of conventional measures, in particular the key interest rate at which liquidity is injected into the system, but also via unconventional measures, designed to bypass the malfunctioning that has arisen in the financial system. The combination of these measures depends on the intensity of the crisis and on the ways it has developed in both the real and financial world.

At a time of general uncertainty, central banks have had not only to try to anticipate events but also to use a more efficient combination of instruments to respond to those events. This challenge remains unchanged, even when looking ahead, given the persistent uncertainty about the gradual recovery in economic activity in advanced countries, including the euro area, and the situation on financial markets particularly in the markets for government securities.

I would like to consider some of the challenges that central banks face at a time like the present, also drawing on the experience that we have gained in respect of similar cyclical phases. It should however be noted that this crisis, although it presents features that are similar to those in the past, is much greater in its nature and intensity. In terms of falling output and rising unemployment, it represents for many countries the most serious crisis since the war. As for the impacts on the banking system and on the risk for sovereign debtors, the industrial countries are confronted with a new situation. This obviously makes the conduct of monetary policy more complicated.

I wish to emphasise that these remarks of mine should not be interpreted as specific indicators of the direction of the ECB's monetary policy in the coming weeks and months. The monthly meeting of the ECB's Governing Council takes place next Thursday, and therefore I will stick to the statements made public at the previous meeting. I would like to develop some conceptual aspects that characterise the analytical framework and the continuously updated flow of information underlying the monetary policy decisions. I will focus on four elements of this framework.

### **Assessing the economic situation**

The first aspect concerns an assessment of the economic situation in the period in which monetary policy has its effects, which is approximately 18–24 months. Making projections is always difficult, but especially so in a period of economic recovery after a crisis like the one we have just passed through. These estimates are based on economic models that were mainly drawn up with pre-crisis data, so it is unclear if the parameters and correlations are still valid. I'll try to give some examples, without going into detail.

An initial element of uncertainty is the productive potential, both in terms of level and growth. Can it be assumed that a crisis like the one we have been through had no effects on the potential level of economic activity and the growth rate? The implications for monetary policy are very different depending on the answer given to this question. The economic policy mistakes that risk being made if a wrong answer is given also differ.

For example, if it is considered that the crisis has had a limited effect on both the level and potential growth rate of the economy, the output gap will be estimated to be very large and the risks of deflation may be considerable. This hypothesis justifies a very expansive monetary policy and fiscal policy, in order to fill the output gap as quickly as possible, with few risks that could have inflationary effects. In other words, the wider the estimated gap, the more reason for keeping the interest rate at very low levels, even close to zero, for an extended period of time, until the economic system returns to levels close to full employment.

If the crisis had the effect of reducing economic potential in terms of level and growth, the accumulated gap is less than when compared with the previous case and will tend to fill up more quickly. In this case, if monetary policy remains accommodative for too long and does not adjust in advance, it risks being late and not countering inflationary pressures in time. If this delay materialises, the central bank then has to raise interest rates to a greater extent, with potentially recessionary effects.

An overestimation of the potential growth rate of the economy also affects the ability of the central bank to properly calibrate the setting of its policy. In principle, as the economy gradually starts to grow above potential, and closes the output gap, the monetary stance should be gradually adjusted through a progressive increase in the interest rate, taking into account the lags with which monetary policy affects inflation and growth. Otherwise, with the same interest rate, an increase in the rate of growth in economic activity implies an easing of monetary conditions. This creates distortions in the allocation of resources, tends to inflate financial asset prices and create imbalances which are very difficult to put right once inflationary pressures emerge.

As you can see, the setting of monetary policy after a serious crisis depends on the assessment of the crisis itself, of the cyclical and structural components and of the output gap. Currently, the estimates of the size of the output gap vary widely among the forecasting institutions, market participants and central banks. For example, the US Federal Reserve tends to see the crisis as having resulted in a reduction of the economic growth potential of the US, but not of its level, so that it estimates the gap to be significant. As far as we are concerned, however, we consider that both the level and pace of economic growth in the euro area have suffered from the crisis and the gap is contained. Our assessment is shared by most research institutions.

Since the output gap cannot be measured, it can be estimated by various statistical and econometric techniques or by using various indicators to try to understand how big the output gap is.

One such indicator is the unemployment rate. In economic models the level and rate of potential growth correspond to an equilibrium unemployment rate. Given the difficulty of measuring the output gap, some economists have proposed replacing it with a measure of the employment or unemployment gap. An expansionary monetary policy would be thus justified as long as unemployment did not begin to decline significantly toward its long-run level.

However, this approach is not without risks. First, the unemployment rate depends not only on the economic growth rate but also on the characteristics of the labour market. Also, if the economic system suffers a real and permanent shock of a structural kind unemployment may remain high for a prolonged period, regardless of the development of economic activity. There is a risk in this case of linking monetary policy to labour market objectives that depend on other factors and other policies.

Another indicator that is used to calibrate monetary policy in the light of economic development concerns money and credit. An acceleration of these financial variables may show that monetary conditions are particularly accommodative. The ECB attaches to these variables an important signalling value that in the past have made it possible to anticipate the trends underlying the economy, particularly as regards inflation.

In summary, a major challenge for central banks concerns the assessment of the current economic situation, in terms of the relative strength of the recovery and the horizon within which this recovery may cause inflationary pressures. Examining the forecasting errors made by the main bodies in the past decade, the tendency to overestimate the growth gap and to underestimate inflation is notable. Such errors encourage the maintenance of very accommodative monetary conditions even when the economy starts to grow again. This was the case after the oil crisis in the mid-1970s, and during the past decade, in 2002–2004, as can be seen by comparing the estimates made for the output gap in those years and those reconsidered with hindsight. In particular if the real-time output gap estimate in 2002–2004 is compared with that carried out after several years we realise that it was initially overestimated, just as the deflation risks were overestimated, giving rise to an excessively accommodative monetary policy.

### **Forecasting inflationary pressures**

The second challenge, related to the first, concerns the difficulty in estimating inflationary pressures and in forecasting them. In addition to the factors highlighted before, a new aspect has emerged in recent years, linked to the increasing importance of global inflation, tied to the commodity markets and products imported from emerging countries. The dimension attained by the emerging countries means that this phenomenon can no longer be ignored. Furthermore, the impact of inflation imported from these countries is likely to be of a different nature than in the past.

In conceptual terms, inflation caused by imported products, especially commodities, can be ignored under three conditions. The first is that the increases are temporary. The second is that the imported price increases do not cause dragging effects on the price dynamics of domestic products. The third is that such increases do not have any effects on the inflation expectations of market participants.

In the recovery phase in the 2000s, only the third condition was maintained, in part. Contrary to what was initially thought, commodity prices have steadily increased, not only in terms of their level but also in terms of growth rates. Domestic wages and prices of domestic products have not increased systematically, but this was partly the result of a reduction in the prices of manufactured goods imported from emerging countries related to the competitiveness gains in those countries and fixed exchange rates. Inflation expectations have remained anchored, but this required in the most acute phase of inflationary pressures, an adjustment in the interest rates.

Looking ahead, the maintained dynamic in the emerging countries poses even greater challenges. We can expect that commodity, energy and food, will continue to grow in line with global demand, unless technological innovations are such that they lead to changes which offset the quotations. Unlike the previous decade, the process of reducing the prices of manufactured goods imported from developing countries seems to have ended, particularly in respect of products imported from China. The gradual appreciation of the exchange rates of these countries should further affect the prices of products imported from advanced countries.

In summary, to a greater extent than in the previous decade, the strong dynamics of the rest of the world are likely to result in a higher inflation rate for imported goods, whether commodities or manufactured goods and services. This effect can be partly mitigated by the ability to shift the production of imported goods to new countries with lower labour costs, or even to bring production back to the advanced countries that have regained productivity, provided they manage to contain their cost dynamics.

In any case, a permanent and repeated increase in the prices of imported products will tend to impact on inflation in the advanced countries, including the euro area. This effect occurs through two channels. The first is simply mechanical, by the weight of imported goods in the

basket of goods and services purchased by households. For example, food and energy account for about 30% of the average shopping basket in the euro area. Assuming an average increase of these products by 4% a year, more or less in line with the rate of growth of the world economy (or long-term interest rates, according to the Hotelling rule), average prices in the euro area will increase by 1.2% only because of the effect of these products. It is therefore not a component that can be ignored, as it would be if core inflation were used as a reference. This concept is obviously losing its relevance in a global world.

The second effect concerns the implications for prices of other products, making up 70% of the basket, and which include manufactured goods and services, some of which are imported and others are produced domestically. Assume, for simplicity's sake, that these goods are only produced domestically. If the prices of these products grow at a rate of 2% per year, overall average inflation is 2.6%, exceeding the 2% objective of most central banks in advanced countries, including the ECB, which aims for inflation of below but close to 2% over the medium term.

The central bank is therefore faced with two alternatives. The first is to revise the inflation rate objective upwards, taking account of imported inflation, or only to look at non-imported inflation and to ignore the rest. This strategy is complex because first and foremost it is not clear how much the imported inflation rate will be going forward, which is not under the control of the central bank. In addition, an upward revision risks bringing a loss of credibility and of being interpreted as a change in strategy. Moreover, a higher inflation objective implies an increase in inflation expectations, and thus of long-term interest rates, which must sooner or later be accompanied by an increase in short-term rates. Finally, if the inflation rate objective is increased it will not be easy to convince national market participants *not* to include this increase in their behaviour, including in wage demands. In a situation of high unemployment, this risk is limited, but gradually as the economic recovery gets under way the risk of second-round effects increases.

Alternatively, the central bank may decide to maintain the inflation objective unchanged at 2% (or less). In this case, since the contribution of imported inflation is 1.2%, this means that domestic products must not increase by more than 1% per year. In other words, to be consistent with inflation at 2%, core inflation, or excluding food and energy, should be 1%. How do you get this result? By focusing monetary policy on domestic inflation of 1%. This can be accomplished through a moderation in costs and prices by producers. This does not necessarily mean a loss of purchasing power, if productivity increases at a pace comparable with imported inflation. However, if this does not happen, the only way of ensuring price stability is to restrict the purchasing power of wages. This requires that price increases for imported goods do not feed into wages and domestic prices.

The numbers I have used are of course by way of illustration and should not be related to the current ones. The point I want to make is that if the growth gap continues between the developed and emerging markets, inflation imported from the latter cannot be ignored. Normally, higher inflation in the rest of the world should be compensated for by an exchange rate appreciation of the domestic currency vis-à-vis the rest of the world. But this only happens in the case of countries with comparable economic structures. In this case, however, the exchange rates of the advanced countries tend to fall compared with those of emerging countries, because of higher productivity growth in the latter group. These two effects, higher external inflation and depreciation, accumulate and lead to a loss in the terms of trade for the advanced countries. To avoid the second-round effects, it is necessary for the dynamics of costs and prices in advanced countries, including those in the euro area, to be significantly more contained than those of emerging countries. This factor should be incorporated into the conduct of businesses, trade unions, public authorities. Only by having domestic inflation significantly lower than 2% is it possible to avoid second-round effects on expectations and to maintain an economic growth rate in line with potential. Otherwise, monetary policy has to become more restrictive than it should be, which leads to slower growth, until the behaviours conform to the new standard.

## **Fragility of financial markets**

The third challenge faced by central banks of developed countries concerns the fragility of the financial system as it goes through a shake-out and an overall reduction in its leverage.

The financial crisis has emerged due to the excessive financial leverage that has fuelled excessive consumption and speculative bubbles on different markets, particularly real estate. The return to a sustainable equilibrium depends on the restructuring of these excesses. This restructuring cannot be immediate, nor should it last too long.

The adjustment cannot be immediate because a too rapid reduction in the leverage risks causing an excessive contraction of the assets and liabilities of financial institutions, with an impact on real activity. In other words, a credit crunch. However, the adjustment should not be too slow either, because prolonging an excessive level of leverage risks creating new imbalances and inducing financial institutions to take excessive risks again.

In this adjustment process, monetary policy plays a decisive role, via conventional measures and exceptional ones. For example, the offer of unlimited liquidity through refinancing operations with the central bank has been essential to favour access to liquidity by many banks at a time when the money markets have not functioned properly. However if it lasts for extended periods, it may delay the necessary adjustments that should be implemented by the banks themselves, particularly by reducing their financial leverage and strengthening their capital. These delays could exacerbate the fragility of the sector itself. As for the traditional policies, we should not forget that the interest rates decided by the central banks affect, among other things, the value of the assets of financial institutions and their (re-)financing costs, and in particular the spreads that prevail in the money markets. In other words, the monetary authorities need to pay attention with their actions so that certain risks, such as liquidity risk, are not excessively compressed. Or so as not to induce financial institutions to take new excessive risks (risk-taking channel).

It is also true, however, that an abrupt withdrawal of the liquidity support measures could cause excessive or too rapid adjustments by financial institutions. For example, sound financial institutions might have to sell significant parts of their assets in a relatively short time. This, in turn, could lead to an excessive depression of prices of financial assets (fire sales), resulting in a chain reaction on the budgets of other institutions that would see the value of *their* own assets diminished. As the recent financial crisis has taught us, a fall in the prices of financial assets could also create liquidity supply difficulties in the markets.

The third challenge of monetary policy lies in the proper assessment of the adjustment process (de-leveraging) by financial institutions and the impact that the change in monetary policy may have on restructuring the imbalances. This challenge is even important for the maintenance of price stability, the ultimate objective of the European Central Bank. Do not forget, in fact, the essential role that the financial system plays in the transmission of monetary policy, which brings me to the fourth challenge.

## **The monetary policy transmission mechanism**

The fourth challenge concerns the effectiveness of the monetary policy transmission mechanism in the face of financial turmoil, particularly with regard to sovereign debts. This challenge is particularly acute in the euro area, where, unlike in the rest of the world, money is separate from public budgets. In the euro area, the public debt problems created by the crisis cannot be inflated away. The Treaty rules it out. The conduct of the ECB rules it out.

The other method of adjustment is the consolidation of public finances via a primary budget surplus that helps stabilise and then reduce the weight of public debt on GDP. In all countries this objective must be achieved, not only in the euro area.

Financial markets assess the risks associated with such adjustments to public finances, and the possibility that governments fail to implement them. In this case, a credit risk is taken into

account, which directly affects the yields on government securities. Given the key role of government securities in the financial systems of different countries, the uncertainty and volatility related to these securities affects the respective economies. This is easily seen by examining the correlation between the risk premia on government bonds with those of banks and of non-financial companies in those countries. The differences in risk premia imply that monetary policy is not transmitted uniformly across the euro area.

Monetary policy impulses are transmitted along the yield curve, up to higher maturities. This transmission is susceptible to disruption if a segment of the yield curve is not working properly. Moreover, government bonds can be used as collateral to obtain liquidity in money markets. The availability of collateral and the perception of market participants of the quality of the collateral itself influence the spreads prevailing in money markets, beyond the overnight rate at which central banks lend funds to the banking system. The money markets and their spreads are in turn crucial in determining whether the monetary policy impulses can be transmitted easily or not, and whether the transactions in money markets are surrounded by uncertainty or take place smoothly.

It is in this context that the Securities Markets Programme (SMP) implemented by the European Central Bank has to be assessed. In May 2010, the tensions to which the Greek government bonds were subject generated uncertainty and a loss of confidence that has spread to the government bond markets of various jurisdictions in the euro area, almost to the point of paralysing them. The purchase of government securities by the European Central Bank aims to safeguard the monetary policy transmission mechanism, by giving support to the market segments considered as crucial for the financing of the financial sector and banks in particular. In this regard it is important to highlight how this differs from the purchase of government securities made in other circumstances, especially by some central banks in jurisdictions outside the euro area. For example, one of the objectives pursued by the Federal Reserve when implementing its quantitative easing programmes is to decrease long-term interest rates. In the case of the ECB, the effects of interventions on overall liquidity are sterilised.

The SMP is one of those non-conventional instruments adopted in recent years, along with others such as those related to its fixed-rate refinancing operations of unlimited amounts for the banking system. Again, the goal is to remedy the malfunctioning of the money market connected to the increase in the counterparty risk premium that has led to a substantial decrease in volume and liquidity.

The implementation of these non-standard measures, aimed at resolving the problems arising from the monetary policy transmission mechanism, presents at least two types of challenge.

The first is the distinction that has to be made clearly between the adoption of these measures and the monetary policy stance, which must be determined on the basis of the price stability objective. This distinction is necessary to avoid “polluting” the overall setting of monetary policy, which could affect the central bank’s credibility and, ultimately, inflation expectations. The types of non-conventional operation implemented by the ECB allow an amendment to the monetary policy stance, in particular through a change in the interest rates, regardless of the non-conventional operations that are used. In other words, decisions about interest rates can be disconnected from the non-conventional measures.

The final challenge is to prevent any non-standard measures which seek to remedy distortions emerging in financial markets from creating in turn further distortions, affecting in particular the behaviour of market participants.

Let me offer a couple of examples related to what I mentioned earlier. The first concerns fixed-rate refinancing operations of unlimited amounts. As I said before, these operations enable the remedying of problems related to increased counterparty risk, affecting in particular weaker institutions. These steps provide liquidity to the markets, but do not solve the problem at its origin, which concerns the solidity of banks’ capital, on which the regulatory

authorities must be vigilant. If refinancing operations are conducted over an extended period, there is a risk that the central bank would replace the market and the consolidation process of the system is delayed. In other words, some banks may become addicted to the liquidity provided by the central bank and have no incentive to sort out their own accounts and to recapitalise. In some countries this dependency can affect the entire banking system, whose difficulties reflect those of the sovereign issuer. To avoid this dependency we have to create disincentives for market participants to refinance excessively only from the Eurosystem, and incentives to return gradually to the market at competitive interest rates.

The second example concerns the risk that the purchase of government securities on the secondary market under the SMP may create an incentive for the authorities of the interested countries to postpone the adoption of the measures necessary for fiscal consolidation or for the restructuring of the financial system. The experience of recent months has shown that governments tend to take unpopular decisions only under pressure from the markets. Action by the central bank that would eliminate such pressures would risk becoming counterproductive and creating moral hazard. Thus, there is a fine line between the goal of maintaining sufficient pressure on the authorities of the Member States and that of avoiding destabilising market dynamics that ultimately hinder the conduct of monetary policy.

## **Conclusions**

In conclusion, the three-year-old crisis has posed new challenges to monetary policy, in all countries, including the euro area. The best way to tackle it is to make use of the policy's independence to pursue the goal, accounting for its actions in a transparent manner. Never have central banks been subject to such close scrutiny as now by the public and the markets. There's a reason. Too often in the past money was used to redistribute wealth and to make the weakest taxpayers pay an unfair tax, that of inflation. This must not happen again.