Christian Noyer: Thoughts on the zero lower bound in relation with monetary and financial stability

Speech by Mr Christian Noyer, Honorary Governor of the Bank of France and Former Chairman of the Board of Directors of the Bank for International Settlements, at the Farewell Symposium in his honour, held by the Bank of France and the Bank for International Settlements, Paris, 12 January 2016.

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I find myself in a strange situation today. Memories of recent policy debates are still vivid in my mind and it is difficult to distance myself from very recent discussions. However, the circumstances require that I take a step back and summon the wisdom supposedly derived from sixteen years in central banking. I will try to do a little bit of each, knowing that I might be better at the former than the latter.

When I started at the ECB in 1998, the zero lower bound was a mere theoretical curiosity, which deserved at most a brief mention of one page in economic textbooks (except, maybe in the case of Japanese textbooks). It turned out that nearly half of my time as Governor was spent in a near zero interest rate environment. Japanese official interest rates have been there for over 20 years. Official interest rates have stood at zero for more than six years in the US – until very recently – and in the euro area and the UK.

It is now well accepted that there are deep and fundamental causes for that prolonged coincidence of low interest rates and low inflation. In advanced economies, and possibly worldwide, equilibrium real interest rates have dropped to very low levels. Falling equilibrium rates may require zero or negative policy rates and, more broadly, very accommodating monetary conditions that conventional instruments cannot deliver. Hence the development of non-conventional monetary policies in all our economies.

Part of the fall in equilibrium rates is a consequence of the crisis and the subsequent deleveraging and balance sheet repair that is taking place in many sectors of the economy. Part may predate the crisis itself and result from shifts in global desired saving and investment.

Whatever the causes, low equilibrium rates complicate the task of monetary policy. Because of the zero lower bound on nominal rates, they constrain the ability of central banks to react to negative cyclical shocks. They may lead to cumulative downward spirals if low inflation keeps real policy rates above the equilibrium level. In addition, the perceived inability of monetary policy to keep inflation close to the objective may fuel pessimistic expectations, a point to which I shall return. Over the last two years it has become increasingly apparent that all those risks are materialising in the euro area.

Finally, low equilibrium rates worsen the trade-off between price and financial stability. Policy rates must be brought down for price stability to be preserved. However, long periods of low interest rates unavoidably create incentives for risk taking and "search for yield". That dilemma can, in principle, be solved through proper macroprudential policies. I will return later to challenges we face in that specific area.

The meaning of price stability

Let me start with a crucial point. *Central banks have a strong mandate to preserve and achieve price stability.* Strict adherence to this mandate – and the clear willingness to fulfil it – is their main protection against the dangers created by the zero lower bound. As we all know, inflation is ultimately driven by expectations. Inflation expectations were remarkably stable during the whole first decade of the euro. Today, the major risk in the euro area is a downward drift that would durably set long-run inflation expectations at a level below our objective of price stability. We do not know much about how expectations are formed. However, I have no doubt

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that the perceived reaction function of the central bank plays a major role in anchoring price stability.

Second, **symmetry** is **of the essence**. For a significant period of time, we have been well below our definition of price stability in the euro area, both in terms of effective inflation and long-term expectations. There is a temptation to take a benign view of this situation and consider that low inflation is beneficial per se, irrespective of its level. In a similar vein, some forms of "good" deflation could be accepted as conducive to stronger growth.

To me, this approach is very misleading. I will indulge here in a little bit of history. As you know, at the inception of the euro, the definition of price stability was set as "lower than 2%". That definition was quickly perceived by markets and economists as meaning we took a benign view of low inflation or, even, stood ready to accept deflation. As a result, the Governing Council felt the need, in 2003, to change the wording and specify the definition of price stability as "lower but close to 2%".

Third, *the validity of the 2% target is widely acknowledged*. That definition of close to 2% has today been broadly adopted in major advanced economies, including in the US and Japan.

This is no coincidence. There is a robust rationale for aiming at 2% or close to 2% and, therefore, not tolerating persistent lower inflation. First, since the work of the Boskin Commission, which, I believe, is also valid for the euro area, we know that available measures tend to overestimate this rate. So it is legitimate to consider that, technically, an inflation rate of 1% may, in reality, be zero. Then, if the central bank aims at 1%, any negative shock would plunge the economy into deflation. To absorb such a shock, some margin – in the order of an additional 1% – is necessary. This simple reasoning provides a very strong basis for the current definition.

The objective of price stability, therefore, must be symmetric. The reaction function of central banks should equally be perceived as symmetric. They should be equally vigilant about any deviation from this objective, in either direction, up or down. A central bank that remained passive with persistently low inflation would in effect encourage a downward drift in expectations. The case for symmetry is even stronger today as we are confronted with several sources of uncertainty, regarding: the economic situation; the transmission mechanism of monetary policy; and the underlying causes for low inflation. We should avoid adding a further uncertainty concerning the true priorities of central banks.

For the same reason, it would be unwise to entertain the idea that the inflation objective should be revised, — upward or downward. The analytical argument for a higher target sounds attractive. For a given equilibrium real rate, a higher inflation objective would reduce the probability of hitting the zero lower bound in the future. This may be a case, however, where analytics do not provide a proper guide for policy. The truth is we do not know how inflation expectations would react to a change in objective. We are in a period where expectation dynamics are highly uncertain. Empirical evidence collected over the last 15 years shows that, in the euro-area at least, a rate of inflation significantly over 2% triggers very negative reactions from the general public. Finally, the credibility of central banks in sticking to their objective could be jeopardized by the change of definition of price stability. And that would generate risk premia and additional volatility in financial markets.

The challenge in achieving price stability

Implementing a symmetric mandate in current circumstances is not an easy task. I see three challenges in the current situation

First, in finding *the optimal mix of non-conventional instruments*. Central Banks in general, and the ECB in particular, have been quite innovative. New methods of forward guidance have been developed that have proved very efficient in the euro area in bringing down the short end of the yield curve. The main question, in my mind, concerns the best combination of the other

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instruments: negative deposit rates and asset purchases. There is no certainty that they can be implemented together in a consistent way.

Asset purchases are expected to act both through changes in asset prices and a flattening of the yield curve. They inject central bank liquidity that forces banks to hold excess reserves in significant amounts. However, the negative rates create a sort of tax on those reserves. The apparent rationale is that negative rates would push banks to grant new loans or buy assets, therefore reinforcing the impact of asset purchases. But since loans create deposits, and the sellers of assets receive liquidity that they need to deposit on bank accounts too, there is simply no way this liquidity can disappear until the central bank decides to withdraw it. Even if residents choose to move into foreign assets, the liquidity in the domestic currency will not disappear and will ultimately be deposited with the domestic banking system. In the end, and as a whole, the banking system is trapped.

The question then is how banks will react and with what consequences for the economy. They could impose negative rates on depositors, but that is not always easy, and in the case of households, it could have a negative impact on the wealth sentiment. They could increase their credit margins, with the effect of tightening credit conditions, although that may also be difficult if the demand for credit is weak. Or the banking system could simply become weaker, with the paradox that the more a bank is conservative and well-managed, extending high-quality loans and covering them by deposits with no short-term market funding, the more it will be penalized!

A second, different challenge, relates to *the rigidities in the economy*. Price rigidity is higher in Europe than in the United States as the goods and labour markets are less "contestable" and outsiders find it harder to compete. And in the labour market, there is a strong downward rigidity on wages. Structural rigidities have complex effects on inflation and monetary dynamics. In the very short run, price rigidity may somehow protect the economy against deflationary shocks and, more generally, increase the output response to a monetary stimulus. This may come at a cost in the longer run, however, as price rigidity impedes the adjustment process and reduces the efficiency of monetary policy. A large part of the perceived differences between the FED and the ECB in terms of policy reactions results, in fact, from differences in price flexibility. Because of specific rigidities in Europe, the fall in inflation that normally follows a decline in output materialized later and more slowly. Moreover, it notably happened after several governments had implemented a series of structural reforms and adjustment policies in 2010–2011. This explains part of the delay in implementing non-conventional measures in Europe, as compared to the United States.

A third challenge comes from *managing the risks that low interest rates and non-conventional policies imply for financial stability*. Significant advances have been achieved in developing proper macroprudential frameworks and instruments for the banking sector. Strong capital and liquidity requirements have increased its systemic robustness. New countercyclical tools have been developed. Progress has been made towards reducing moral hazard through proper resolution mechanisms for large and systemic institutions.

However, the timeliness and efficacy of macroprudential measures on specific areas of exuberance, such as real estate, are still being put to the test. More importantly, I see one blind spot. Risk has not fully disappeared but rather has morphed and migrated to new parts of the financial system. Specifically, maturity transformation has developed outside the banking sector and by direct market intermediation. Increasingly, it is taking place through vehicles – such as open funds and ETFs – that issue very short-term (often intraday) liabilities and invest in long-term instruments. It may be a matter of priority to develop a conceptual and operational approach to macroprudential policy that allows regulators to monitor those parts of the financial system that are currently out of reach.

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When central banks entered into non-conventional territory, most observers saw that as a temporary incursion. For some of us, this temporary situation has lasted seven years. For the euro area, the current horizon extends, at least, until 2017. This is quite a long period. For many young people today – say, for instance, current PHDs students -, conventional monetary policies are a prehistoric curiosity. Non-conventional is the only "normal" that they have experienced in their lifetime as adults.

Will the future look like the past or be different? This question cannot be avoided for three reasons.

First, over the past 30 years, long-term real interest rates worldwide have been steadily declining. If low equilibrium rates are a permanent phenomenon, which is rooted in structural shifts in the world economy, then current difficulties and challenges will persist. The chances that we will sooner or later hit the ZLB again are non-negligible. Some observers make the point that, if we look at historical frequencies of cycles and recessions, it is much more likely than not that interest rates may need to return to zero at some point in the future. "Non-conventional policies" may then become part of central banks' standard toolkit, rather than a unique exception.

Second, one legacy of the crisis will be the size of central banks' balance sheets. A central bank's balance sheet is the foundation on which it conducts its policies, through its monopoly to create base money. An expanded balance sheet can be seen in two ways. Either as a problem because the central bank leaves too big a "footprint" on money and financial markets; and this could impair their normal functioning. Also, by holding and actively managing a portfolio of public debt, central banks take quasi-fiscal responsibilities that must be avoided. Alternatively the current situation may be seen as an opportunity, at least in times of crisis. Central banks can use their expanded balance sheet to develop a richer set of tools and better address the challenges they are facing.

Finally, the pre-crisis, inflation-targeting regime, was closely associated with the "Great Moderation" when inflation was low and output growth stable. This period of sustained growth and limited volatility was considered normal at the time. We know now that it was very exceptional from a historical perspective. In the future, it is likely that monetary and financial stability policies will be periodically confronted with some kinds of abrupt, discontinuous shocks for which appropriate responses will have to be devised.

In the coming years, there will be no shortage of very difficult issues for you to debate at the periodic meetings in Basel. One thing that makes me confident about the future is my experience at the BIS and with my colleagues, many of whom I am honoured to see in the audience today. Looking back at my life, nowhere else have I met a group of leaders and officials who are so highly dedicated, so deeply sophisticated and professional, so devoted to acting together for the public good, so mutually respectful of each other. There is, indeed, something unique in the culture of central banking, which one cannot find anywhere else and which cannot be replicated. It is a source of pride to have chaired the Board of the BIS for more than five years. Nowadays, it is common to hear that central banks are the only game in town. This, I do not know. But one thing I do know is that many disasters could have occurred in the last seven years if it had not been for your collective wisdom, courage and willingness to act and take risks in very extreme circumstances. The world owes much gratitude to the people who are here or represented today.