Peter Praet: Deleveraging and the role of central banks

Speech by Mr Peter Praet, Member of the Executive Board of the European Central Bank, at the Conference “The effect of tighter regulatory requirements on bank profitability and risk-taking incentives”, Bocconi University, Milan, 26 October 2012.

* * *

I would like to thank Roberto Motto, Fédéric Holm-Hadulla, Cornelia Holthausen and Angela Maddaloni for their contributions to the preparation of this speech.

Ladies and Gentlemen,

I am pleased to speak today at this renowned banking conference at Bocconi University.

The banking sector’s deleveraging process in the euro area has been underway since 2008. Until recently, most of the adjustment was achieved by increasing capital via equity issuance, conversion of hybrids, capital injections and retained earnings. With the intensification of the sovereign debt crisis there has been stronger pressure to also adjust via asset shedding, especially those assets with higher risk weights.

The deleveraging process, while necessary, always bears the risk of becoming abrupt and disorderly, thus threatening the provision of credit to the non-financial sector and the transmission mechanism of monetary policy.

In my remarks today I will highlight the challenges for the central bank in dealing with this process, arguing that the measures undertaken by the Eurosystem in recent years have helped to prevent self-enforcing spirals and a credit crunch. I will then focus on the special circumstances of the euro area, given its institutional features. Finally I will highlight the expected benefits associated with moving towards a strong banking and financial union in the euro area.

Banking sector’s deleveraging

From a policy perspective it is useful to think about banks’ deleveraging as arising from two possible sources: demand factors and supply factors. Although somewhat artificial, this distinction may be instructive in guiding the appropriate policy response.

Typical demand factors are the lack of profitable opportunities for investment or the presence of deleveraging forces arising in other sectors of the economy. Supply factors are related to banks’ insufficient balance sheet capacity to hold assets. This can arise from capital shortfalls or funding strains – or both.

Banks can address capital shortfalls and funding strains by adjusting the asset and/or liability side of the balance sheet. Asset shedding is the most far-reaching solution. If balance sheet pressures arise from funding strains, banks may decide to sell the most liquid assets and non-core assets that can be liquidated in a short space of time. On the other hand, if deleveraging pressures are mainly related to capital positions, banks have an incentive to shed more capital-intensive assets to induce the largest reduction in risk-weighted assets.

Abrupt adjustments of the asset side of the balance sheet can lead to a credit crunch, if they are made by many banks simultaneously. Rational behaviour at the level of an individual bank (and investor) can impose externalities on other players in the financial system through fire sales and financial contagion.[1] This can set a self-sustained process in motion that ultimately brings the whole financial system to collapse.

---

[1] See V. Acharya and S. Viswanathan, (2011) “Leverage, Moral Hazard and Liquidity”, Journal of Finance, Vol. 66, No 1; F. Allen and D. Gale, (2000) “Financial Contagion”, Journal of Political Economy, Vol. 108,

Alternatively, if banks prefer to keep a certain portfolio of assets, they have to make an adjustment on the liability side. Banks can recapitalise by issuing equity, or there can be the activation of bail-in measures. Or banks can try to tap alternative sources of funding in case deleveraging pressures come from the inability to roll over existing liabilities.

The mix of actions on the asset and liability side that banks may choose to take is not necessarily optimal from a welfare point of view. For instance, given the reluctance of shareholders to issue equity and dilute the value of their shares, banks may prefer to shed assets or cut lending rather than increase capital.

This creates a role for authorities in trying to steer the process towards certain courses of action in which banks' choices are better aligned with economic welfare. For instance, the supervisory authority may put pressure on banks to increase the level of capital – for example, through upward adjustment of capital requirements under the Basel III framework. In addition, authorities may resort to bail-in measures whereby a bank's existing debt holders would be forced to convert parts of their debt into bank equity or to accept a (partial) write-down of their claims.

Of course, authorities face several constraints, due to the lack of specific powers to force resolutions, for example, or incentive problems leading to delayed action. For instance, bail-in measures may take some time to administer because of the complexity of large banking groups and the various legal issues involved. In this context, Europe faces specific challenges given the lack of harmonisation of national systems, which strongly complicates the resolution of cross-border banks. Significant steps are being taken to overcome these shortcomings. I will return to this topic after discussing the implications of deleveraging for monetary policy.

Monetary policy and the deleveraging process

Whereas the deleveraging of the banking sector is a necessary process to correct the imbalances built up prior to the crisis and to bring the economy back to strong and sustainable growth path, "disorderly" deleveraging can represent a serious threat to price stability. I have already described some of the mechanisms through which deleveraging can spiral off. I would like to now focus on the implications of deleveraging for the transmission mechanism of monetary policy.

The financial sector represents a powerful conduit of the monetary policy impulses decided by the central bank – the so-called credit channel of monetary policy.[2] It works mainly through changes in the balance sheet position of banks and (non-financial) borrowers, influencing credit demand and supply. When there are significant adverse shocks to the balance sheets of financial institutions, for example because of sharp decreases in the values of assets or because of impairment in funding markets, banks can respond by tightening credit standards applied to households and firms.

The transmission of shocks hitting financial institutions' balance sheets to the real economy – or originating within the financial system itself – is exceptionally strong if banks are not able to shield credit supply and if borrowers are highly dependent on bank credit to finance investment and consumption. Many euro area banks, for instance, have been highly dependent on market funding and have therefore been vulnerable to sudden stops in this source of funding. We also know that in the euro area banks are the main providers of funds

No. 1; and M. Brunnermeier and L. H. Pedersen, (2009) "Market Liquidity and Funding Liquidity", Review of Financial Studies, Vol. 22, No 6.

2 See Bernanke, B. S., and Gertler, M., 1995, "Inside the Black Box: The Credit Channel of Monetary Policy Transmission." Journal of Economic Perspectives 9(4):27–48 and a vast following literature.

to the non-financial sector.[3] Therefore, the potential for a very large amplification of shocks to the real economy is particularly strong in the euro area.

In such situations, the transmission mechanism of standard monetary policy impulses may become impaired and the central bank has to resort to non-standard measures. Let me elaborate on that.

In normal times, central banks provide liquidity to the banking sector through open market operations. Typically, banks obtain central bank liquidity against the provision of central bank eligible collateral in a repo transaction. By setting the interest rate of its open market operations, the central bank can directly steer the risk-free rate in the short end of the money market. This then feeds through to other, longer-term interest rates and ultimately to credit conditions applied to the real economy.

During financial and especially banking crises, banks' demand for central bank liquidity may sharply increase to compensate for the decline in other forms of banks' liabilities, often resulting from withdrawals of bank deposits. By accommodating such an increase in the demand for liquidity, the central bank is the only agent able to prevent a process of disorderly money-supply contraction. The stabilising role of the additional liquidity is especially strong if it is supplied for longer maturities. In this way, access to central bank liquidity allows banks to obtain funding at the policy rate – as long as they have the required collateral and a sound business model.

Thus, the central bank can use the amounts and modalities of its liquidity provision to the banking sector to influence prices in the money market and other markets for relevant assets. By easing the pressure to abrupt deleveraging, the central bank can reduce the likelihood of a credit crunch and adverse spiralling dynamics, thereby addressing downside risks to price stability.

It should be kept in mind however, that monetary policy can exert mitigating effects, but cannot solve the underlying problems, often of a structural nature. In addition, the creation of abundant liquidity can in itself create side effects that need to be carefully monitored.

First, there is a risk of distorting the incentives to carry out the necessary adjustment by favouring evergreening of loans and "zombie-bank"-type dynamics. This would represent a continued source of uncertainty about banks' exposures to non-performing loans, about the possible implicit liabilities faced by governments and ultimately a drag to economic growth.

Second, large liquidity-providing repo operations increase asset encumbrance in the banking sector. Banks tie certain types of collateral with the central bank, and these assets are no longer available to the bank for other types of transactions. And this increases banks' difficulties to issue unsecured bonds and thus can worsen their access to private sources of refinancing.

The ECB's measures during the financial crisis

Let me now turn to the concrete measures that the Eurosystem has undertaken during the crisis.

When rumours about some European banks' exposure to the US subprime market in August 2007 strongly affected money market interest rates and trading volumes within just a few hours, the ECB reacted by providing liquidity to the banking sector on a short-term basis – first overnight, then for slightly longer maturities. This served to ensure that solvent banks would obtain the liquidity that was disappearing from other sources. The first overnight provision of liquidity by the ECB of almost € 100 billion was demand-driven and revealed the

---

[3] See Allen, F, Chui, M., and A. Maddaloni, A., 2004. "Financial Systems in Europe, the U.S.A. and Asia." Oxford Review of Economic Policy 20(4):490–508.

high uncertainty within the banking sector on the ability to obtain funding from private sources.

In general, during the first year of the crisis, there was a high degree of uncertainty on individual exposures, but not yet a very strong perception of more severe problems in the banking sector as a whole. Central bank liquidity provision thus aimed at stabilising interest rates, and ensured that temporary liquidity problems of banks would not create problems for bank solvency.

The Eurosystem was able to deal with these tensions by only slightly altering its operations under the standard operational framework. This was due to the fact that the number of counterparties to monetary policy operations has historically been very large in the euro area, and because the standard framework offers quite some flexibility. In a nutshell, during this first phase of the crisis, the Eurosystem (1) more flexibly used its open market operations by changing the time-path of liquidity provision and employing fine-tuning operations, (2) lengthened the maturity structure of its open market operations (for instance, operations with a maturity of six months were introduced, whereas the maximum length had been three months before the crisis), and (3) coordinated with other central banks around the world to provide US Dollar funding.[4]

The failure of Lehman Brothers in September 2008 and the subsequent very severe financial market tensions led the Eurosystem to adopt further measures. Official interest rates were cut by 325 basis points in just a few months to the then-historically low level of 1 per cent by March 2009. Open market operations were conducted as tenders with a fixed rate and full allotment. This implied that the ECB no longer controlled the aggregate supply of liquidity to the banking sector, but that the aggregate demand by banks, subject to individual banks' availability of adequate collateral, determined total liquidity provision. As a consequence, the Eurosystem's balance sheet increased, and short-term money market interest rates dropped to levels close to the deposit facility rate. Moreover, the ECB further widened the set of eligible collateral. Finally, and importantly, the ECB introduced a limited number of open market operations with maturities of one year (three such operations were conducted in 2009).

The objectives behind this second wave of measures differed from the first wave. By the end of 2008, the problems of banking sectors – in the US, Europe and elsewhere – and the need for massive deleveraging had become apparent. At the same time, the interbank market was severely disrupted, and so was the transmission of monetary policy impulses to the real economy. The measures adopted by the Eurosystem were geared at restoring the functioning of its transmission mechanism, and at supporting the continued availability of credit to households and non-financial firms.

As a result of increasing tensions in the sovereign debt markets since 2010, the situation of the euro area financial sector worsened. Doubts about the sustainability of sovereign debt levels in some countries of the euro area led to significantly increased levels of sovereign bond spreads. This, in turn, also led to higher interest rates in the private debt markets of the affected countries. It became apparent that the health of the national banking sector was often closely intertwined with the health of the local sovereign: funding problems in the banking sector and weak fiscal positions mutually reinforced each other.

Significant heterogeneity emerges when looking at changes in the bank balance sheet items in different countries of the euro area, primarily concerning changes in deposits and in credit growth. "Sudden stops" were observed in the funds flowing towards the euro area countries more adversely affected by the sovereign crisis, with changes in the bank deposits in

---

[4] See for instance Cassola, N., A. Durré and C. Holthausen (2011): "Monetary Policy Operations: experiences during the crisis and lessons learnt", Proceedings of the Sixth ECB Central Banking Conference "Approaches to monetary policy revisited – lessons from the crisis".

stressed and non-stressed countries. These developments were eventually mirrored in the Target balances of the Eurosystem

The large differences in financing conditions across countries translated into a very high fragmentation of credit growth across the national dimension.

The ability of banks in some countries to deleverage is heavily complicated by the adverse market conditions. Not only do banks in the affected countries often need to deleverage more than others, but also their portfolios consist of less liquid assets (such as domestic sovereign bonds) and they face, *ceteris paribus*, higher funding costs than their peers in other euro area countries. Often they are even completely cut off from traditional private sources of funding.

With the deepening of the sovereign debt crisis, the Eurosystem undertook additional measures, with a particular view to mitigating the increased heterogeneities in the euro area financial conditions. In 2010, the Securities Markets Programme was launched, aimed at certain important segments of the financial market that were dysfunctional, but vital for the transmission of monetary policy signals. Additionally, in December 2011, the Eurosystem announced further enhanced credit support in the form of two repo operations with maturity of up to three years.

There are indications that especially these three-year longer-term refinancing operations (LTRO) have proven effective in preventing an abrupt deleveraging. They significantly helped in restoring confidence in financial markets by providing insurance on the ability for banks to rely on ECB liquidity. This has taken pressure off banks to fire-sell assets or to shrink their loan book. In fact, there is some evidence that banks who bid for liquidity at the three-year operations used this liquidity to address the roll-over risk implied by the issuance of debt securities or other funding instruments that will mature over the next few years.

At the same time, there is some first evidence that the provision of long-term liquidity has helped in supporting credit provisions, especially in countries more affected by the sovereign debt crisis, therefore helping to address impairments in the transmission of monetary policy.

The ECB has recently announced the details of Outright Monetary Transactions (OMT) in secondary markets for sovereign bonds in the euro area in order to address severe distortions in government bond markets which in particular originate in unfounded fears on the part of investors of the reversibility of the euro. OMT also aims to safeguard the monetary policy transmission mechanism in all countries of the euro area, thereby preserving the singleness of the ECB's monetary policy.

The way forward: moving towards an integrated financial market union

As I mentioned already, while monetary policy can alleviate deleveraging pressures in crisis times, it cannot address their root causes. In fact, to tackle the underlying problems, a wide-ranging policy response is necessary, *inter alia*, pertaining to public finances, economic competitiveness and the financial sector.

Given the focus of today's conference, I would like to use the remainder of my speech to consider the last aspect, namely the institutional framework that governs financial markets in European Monetary Union (EMU). In particular, I would like to address two questions: *first*, what principles should the institutional architecture be based on in order to be effective in avoiding excessive risk-taking and cross-border fragmentation of banking sectors; and *second*, how do the on-going reform efforts towards a "financial market union" at European level contribute to these aims?

In answering the first question, policy-makers should be guided by two criteria: *first*, economic actors that stand to gain from risky activity should also bear the associated downside risk. To be concrete, a system, in which banks can expect to be bailed out by taxpayers if their investment decisions go wrong, is neither efficient not fair. *Second*, the

institutional architecture of EMU should achieve a level of integration that is commensurate to the integration of its banking financial sectors. Hence, there should be no systematic cross-country differences in the design and implementation of the rules that govern financial markets. Otherwise, such differences might become a source of financial fragmentation in their own right.

Neither of these criteria is easy to fulfil. As the experience with Lehman Brothers has demonstrated, failures of large, integrated financial institutions can have devastating consequences for economic stability. Risks of contagion from one institution to entire financial sectors greatly complicate any effort to establish a more symmetric risk and reward-structure for banks. Harmonising financial sector policies across countries in turn requires substantial operational and legislative efforts, given that national institutions have evolved separately and are now heterogeneous in many regards.

All these difficulties can be addressed and, in fact, they *are* being addressed by European policy-makers. In particular, the recent initiatives at European level comprise several crucial steps to achieving a more incentive-compatible as well as a more integrated and coherent framework among countries.

Let me elaborate on several concrete elements. The first step is the establishment of a Single Supervisory Mechanism (SSM). The SSM aims to ensure that all supervisory decisions about euro area banks are taken in a consistent and stringent manner, independently of the country in which it is located. Once fully effective, this will reassure markets that all banks face the same scrutiny and thus will counteract financial market fragmentation in the euro area. Moreover, by delegating supervisory decisions from the country to the euro area level it facilitates the internalisation of cross-country spill-overs, thus allowing for more efficient outcomes.

As a further key element, the European Commission recently released a proposal for a bank recovery and resolution directive, which contains important crisis prevention, early intervention, and resolution tools. Again, this toolkit serves to avoid tax-payer financed bank-rescue operations and to harmonise practices across countries. A fully-integrated financial framework, as also envisaged under the current reform agenda, would move beyond these common tools by establishing a common resolution framework, including a resolution authority at euro area level. This would further strengthen harmonisation and stringency in line with the “philosophy” underlying the bank recovery and resolution directive.

Finally, the current reform efforts envisage the harmonisation of deposit guarantee schemes with a view to establishing a level playing field across countries and ensuring appropriate contributions from the banking sector to the financing of such scheme.

To sum up, the on-going and envisaged reforms towards a financial market union follow a clear and economically sound strategy. It is crucial to follow through with these efforts in a swift and diligent manner.

Conclusion

Let me conclude. The banking sector is experiencing a necessary correction to overcome past excesses and to restore its health. The ECB’s non-standard measures have prevented destructive self-sustained dynamics. They have also helped to address heterogeneity in the transmission mechanism of monetary policy across different euro area countries. And most importantly they have contributed to ensuring price stability.

Going forward, a more integrated financial market union is one of the top priorities in Europe. And the single supervisory mechanism – just a few months ago considered as out of reach in the foreseeable future – is now under construction.

Still, it is of the utmost importance that national governments and European policy makers undertake all needed structural measures to address the fundamental sources of the current crisis.