



DIRECTORATE-GENERAL FOR INTERNAL POLICIES

POLICY DEPARTMENT **A**
ECONOMIC AND SCIENTIFIC POLICY

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Non-Standard Monetary Policy Measures - An Update

Monetary Dialogue September 2013

COMPILATION OF NOTES



DIRECTORATE GENERAL FOR INTERNAL POLICIES
POLICY DEPARTMENT A: ECONOMIC AND SCIENTIFIC POLICY

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Monetary Dialogue 23 September 2013

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Abstract

Four economists assess the effectiveness of ECB's non-standard monetary policy measures in the euro area and in different Member States and discuss the unintended consequences of these measures as well as the risks for price stability and asset price developments. In the current context of weak economic activity and subdued growth going forward, the papers also address the issues of what other tools/instruments could the ECB use in order to support lending to the private sector and stimulate economic activity in the euro area.

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AUTHORS

Charles WYPLOSZ, Graduate Institute of International and Development Studies, Geneva
Daniel GROS, Cinzia ALCIDI and Diego VALIANTE, CEPS, Brussels
Guillermo DE LA DEHESA, CEPR, London
Ansgar BELKE, University of Duisburg-Essen and DIW Berlin

RESPONSIBLE ADMINISTRATOR

Dario PATERNOSTER
Policy Department A: Economic and Scientific Policy
European Parliament
B-1047 Brussels
E-mail: poldep-economy-science@ep.europa.eu

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ABOUT THE EDITOR

To contact the Policy Department or to subscribe to its monthly newsletter please write to:
poldep-economy-science@ep.europa.eu

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INTRODUCTION

In times of extraordinary financial market tensions, the monetary transmission mechanism may be hampered due to dysfunctional financial markets. The ECB may then resort to non-standard, unconventional measures¹ to ensure the transmission of monetary policy impulses to the economy.

These unconventional tools included liquidity support to commercial banks at favourable rates such as that provided through the ECB Long-Term Refinancing Operation (LTRO) against collateral. Until early 2008, the longest **LTRO** maturity was three months. Since then the ECB has successively introduced six-month, 12-month and 36-month terms for LTRO finance.

The Eurosystem can also conduct interventions in the euro area's public and private debt securities markets by purchasing certain assets outright, instead of merely accepting them as collateral. On 2 August 2012, the Governing Council of the European Central Bank (ECB) announced that it would undertake outright transactions in secondary, sovereign bond markets, aimed "*at safeguarding an appropriate monetary policy transmission and the singleness of the monetary policy.*" On 6 September 2012 the ECB published the technical features of these Outright Monetary Transactions (**OMTs**).²

Analysts generally agree that ECB commitment to resort to non-standard monetary policy tools have been instrumental to calm down markets, reduce stress in bank funding, improve bank lending and, overall, to take away fears of a collapse of the euro. At the same time criticisms have been voiced, in particular as regards the OMT, that it would delay fiscal discipline, blur the distinction between monetary and fiscal policies, lessen pressure on painful structural reforms and create inflation or another asset bubble.

Against this background, the papers included in this compilation assess the effectiveness of ECB's non-standard monetary policy measures adopted in the euro area in recent years and discuss some of the unintended consequences of these measures, in particular the risks to price stability and/or abnormal asset price developments. In the current context of weak economic activity and subdued growth going forward, the papers also raise the issue of what other tools/instruments could the ECB use to better support lending to the private sector and stimulate economic activity in the euro area.

The general perception was that unconventional monetary policy tools have been instrumental to break the perverse feedback loop between sovereign risk and financial risk, to establish more uniform lending conditions across euro area Member States and, ultimately, to avert a collapse of the monetary union. While there was a general consensus that the "unlimited" size of the OMT programme was key to reduce financial fragmentation in the euro area, some experts downplayed its effectiveness on the grounds that OMT comes with strict (fiscal) conditionality and, in particular, requires full (financial) market access as a pre-condition for activation.

It was noted that the impact of these measures on the real economy has, however, been rather limited so far. It was claimed that unconventional monetary measures are necessary

¹ For details, see the ECB WP of July 2013: Effectiveness of Non-Standard Policy Measures; <http://www.ecb.int/pub/pdf/scpwps/ecbwp1562.pdf>.

² See: http://www.ecb.int/press/pr/date/2012/html/pr120906_1.en.html. In the press conference on 4 July 2013 Mr Draghi stated in response to a question regarding the missing OMT legal acts: *'The second point is that OMT legal acts will be ready when OMT is ready to be activated. What is the benefit of having it now? People are working on that by the way. So I am giving you the same answer as last time. It is going to be ready when OMT is ready to be activated.'* See <http://www.ecb.int/press/pressconf/2013/html/is130704.en.html>.

during period of panic, but in the long run the survival of the euro can only be ensured if the fundamental divergences that have arisen over the last decade are corrected.

Risks to price stability or the likelihood of asset price bubbles were generally downplayed by experts. It was pointed out that expanding ECB balance sheet via non-standard monetary policy measures does not automatically boost prices. For that to happen, the additional money created must generate private credit growth and, via that channel, demand. The same holds for asset purchases: credit is needed first. What data show, instead, is a large expansion of the monetary base (i.e. an expansion of ECB's balance sheet) accompanied by very subdued credit growth, as witnessed by the collapse of the money multiplier (i.e. the relation between ECB "high-power" money and broader money aggregates such as M2 or M3).

NOTES



DIRECTORATE GENERAL FOR INTERNAL POLICIES
POLICY DEPARTMENT A: ECONOMIC AND SCIENTIFIC POLICY

Non-Standard Monetary Policy Measures - An Update

Charles WYPLOSZ

NOTE

Abstract

There are many types of non-standard monetary policy measures, each with different objectives. Some are structural in nature, and they have been effective alleviating pressure on particular market segments. Other measures have been imagined to represent a new instrument when the interest rate is trapped at the zero lower bound. Their effectiveness remains in doubt.

The Eurosystem is facing a particularly daunting challenge as it faces a mix of macroeconomic and “sectoral” distress: it is sectoral in the sense that individual Member States with highly indebted governments face much higher interest rates than the other Member States. This does not just break the transmission mechanism down; it also imparts a powerful contractionary effect on the macroeconomies of the affected countries. Since it affects some countries and not others, this situation requires that the central bank transfer income across countries, exactly like it transfers resources from national taxpayers to national distressed sectors. Limited actions like the SMP and LTROs have failed to reduce the spreads. Potentially unlimited action like the OMT has succeeded but the spreads remain large and volatile.

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EXECUTIVE SUMMARY

There are many types of non-standard monetary policy measures, each with different objectives. Some are structural in nature: they are designed to alleviate pressure on particular market segments such as the mortgage market in the US or the convertible bond market in the euro area. They have been effective, because the resources of a central bank are effectively unbounded. Other measures have a macroeconomic objective; they are intended as a new instrument when the interest rate is trapped at the zero lower bound. Their effectiveness remains in doubt. In the US, they seem to have succeeded in lowering the long-term interest rates through a mix of forward guidance and massive securities acquisition.

The Eurosystem is facing a particularly daunting challenge as it has to deal with a mix of macroeconomic and "sectoral" distress. The macroeconomy is not growing, at least not enough to bring unemployment down and to stop the increase in non-performing loans that represents a growing threat of bank crisis. The challenge is also sectoral in the sense that individual member countries with highly indebted governments face much higher interest rates than the other member countries. As repeatedly noted by the ECB, this breaks the monetary policy transmission mechanism down, compounding the zero lower bound problem: the policy interest rate is nearly at its minimum and, yet, borrowing rates in the crisis countries are far too high. The result is that the very supportive stance of standard monetary policy is associated with a powerful contractionary effect on the macroeconomies of the affected countries.

Being structural, this situation can be treated by the central bank if it mobilises sufficient resources. But since some countries are affected and not others, this situation requires that the central bank transfer income across countries, exactly like it transfers resources from national taxpayers to national distressed sectors such as the US mortgage market or the convertible bond market in the euro area. Non-standard limited actions like the Securities Market Programme (SMP) and the Long Term Refinancing Operations (LTRO) have failed to reduce the spreads. Potentially unlimited action like the Outright Market Transactions (OMT) has succeeded but the spreads remain large and volatile. More has to be done.

It has been argued that these policies have potentially adverse effects. Large liquidity injections are seen as a source of inflation. Record low interest rates are predicted to generate asset price bubbles. Both concerns are misleading. They ignore what drives inflation. A key component of the reasoning is that bank credit grows excessively fast. Not only bank credit has been and remains anaemic throughout the euro area, but there exist powerful instruments to slow credit growth when and if it starts rising fast.

The most serious risk at this stage is the conditional nature of the OMT programme. A bank crisis requires immediate action and, for large countries, OMT action would be needed far too urgently to allow for an agreement on a EU-IMF programme.

1. INTRODUCTION

The last few years have seen central banks venture into unknown territory. Policy actions that would have been considered impossible and dangerous before 2008 have been promptly put in place in many developed countries. As any innovative experimentation, these actions are risky and raise suspicion, even vocal criticism. Yet, these are controlled experiments rooted in knowledge accumulated since the previous massive financial crisis that followed the 1929 Wall Street crash. This does not mean that risk is absent, but some of the criticism is outdated.

To start with, the expression “non-standard measures” cover several different actions, taken in response to different threats. Initially, these measures were directed at the financial system, for example the Troubled Asset Relief Program (TARP)¹ in the US and Covered Bonds Purchase Programme (CBPP)² in the euro area. In the wake of the financial crisis of September 2008, most banks had lost market access and were suffering from acute funding shortages. Lehman Brothers had fallen victim to acute illiquidity. TARP in the US and CBPP in the euro area were designed to provide immediate and abundant liquidity to banking systems. This was not particularly novel. The innovation of the CBPP was that the Eurosystem decided to buy collateralised bank debts instead of lending to banks against collateral, a small step from usual practice.

In order to cushion an unavoidable recession, central banks did the very traditional thing: they cut interest rates. What was new was the readiness to cut them to nearly zero. Once they had brought their policy interest rates down to the zero lower bound, of very close to it, the central banks of many developed countries found themselves with no standard instrument. A premature withdrawal of fiscal policy stimulus implied that growth would not resume soon or would be lethargic. The consequence would be lost incomes, rising unemployment and a continuous weakening of already fragile banking systems. Most central banks concluded that they should take it upon themselves to try and improve this gloomy, and dangerous, outlook. To that effect, central banks had to innovate. Here again, the innovations took different forms in different countries and over time, reflecting different primary policy objectives.

¹ TARP is a program of the US government to purchase assets and equity from financial institutions to strengthen its financial sector. TARP was adopted in October 2008 and was a component of the government's measures to address the subprime mortgage crisis. The TARP program originally authorised expenditures of USD 700 billion.

² CBPP is a programme of the ECB to purchase covered bonds from financial institutions, with a view to easing funding and lending conditions for credit institutions most affected by the financial crisis. The first CBPP with a targeted nominal amount of EUR 60 billion was launched in July 2009 and ended in June 2010. The second CBPP with a targeted nominal amount of EUR 40 billion was launched in November 2011 and ended in October 2012.

2. DIFFERENT OBJECTIVES; DIFFERENT TOOLS

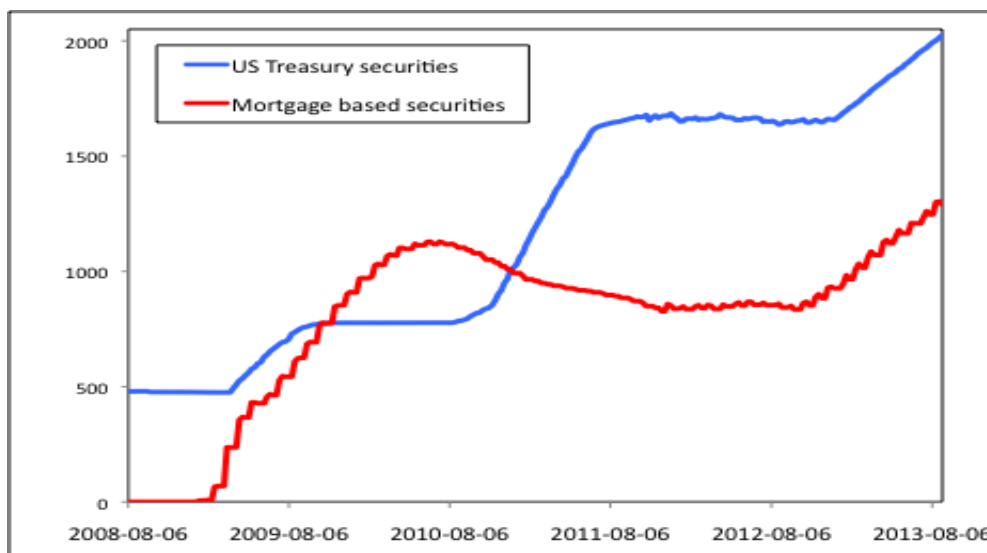
2.1. The US experiment

The US Federal Reserve was primarily concerned about growth and employment, as requested by its dual mandate. Its objective was to encourage more bank lending to support spending by households and firms. It adopted a three-pronged strategy.

First, in line with the observation that unhealthy – or over-leveraged – banks do not lend, in addition to direct lending to the private sector, the Fed encouraged a quick, bite-the-bullet restructuring of banks hit by the crisis. This involved buying impaired – a.k.a. toxic – assets and arranging for rigorous stress tests, followed by recapitalisation. By 2010, most US banks, big and small alike, were reasonably well capitalised.

Second, recognising that the interest rate that matters most for borrowers is not the very short-term policy interest rate, but medium and long-term rates, the Fed undertook two original measures. Because long-term interest rates are driven by market expectations of what the short-term policy rate will be over the longer run, the Fed sought to affect these expectations. What is now called “forward guidance” implied repeated statements that the policy rate would remain low for one or two years and then until the unemployment would decline enough. This marked a sharp change for a central bank that had long refused to appear committed to future actions. In effect, the Fed only made conditional commitments, making it clear that it could change its stance if conditions were to differ from prior expectations. Conditioning on the unemployment rate, the latest step to date, represents an important refinement.

Finally, the Fed departed from standard practice by attempting to directly lower longer-term interest rates. Until then, the standard view was that central banks can only affect the very short-term (overnight) interest rate because they have a monopoly on money creation, which is nearly the same as a very short-term loan. Private and public borrowers produce longer-term assets in such large amounts that, it was felt, the central bank is too small to really make a difference. Quantitative Easing (QE) represents a radical departure from this view. The Fed committed to acquire very large amounts of long-term assets. Figure 1 shows the three waves of action. QE1, which started in March 2009 and lasted about one year, involved large-scale acquisitions of both public and private securities, reflecting the Fed’s objectives of both bringing long rates down and relieving banks by absorbing toxic assets. The Fed absorbed about USD 400 bn. of public debt and more than USD 1000 bn. of mortgage-based securities. Starting in September 2010, QE2 focused on the long-term interest rate (“Operation Twist”) and only concerned public debt instruments. The intervention netted about USD 1000 bn. Finally, QE3, which started in September 2012 and is now about to end, was more like QE1. The nature and size of the exercise have no historical precedent.

Figure 1: Securities held by the Federal Reserve (USD billion)

Source: FRED Database, Federal Reserve Bank of Saint Louis.

2.2. The euro area experiment

The Eurosystem's first non-standard action started in July 2009 with CBPP1 and lasted exactly one year. By end June 2010, the Eurosystem had absorbed EUR 60 billion of covered bonds. In comparison with the US, the scale is very small and it concentrated on one narrow segment of the market that was perceived as most affected by the financial crisis. Importantly, covered bonds are more widely used in France and, specially, Germany.

Starting in December 2011, the Eurosystem innovated with the LTRO, expanding its money market interventions in three important ways. First, the maturity of the refinancing, which rarely exceeded one week before the crisis, was extended to three years. Second, the procedure "full allotment at fixed rate" meant that all valid requests for funding were accepted and that the interest rate was stated *ex ante*. Third, the amounts provided through LTRO were of a different order of magnitude than previous refinancing operations as the Eurosystem lent out about EUR 1 trillion in December 2011 and March 2012. This was a major breakthrough.

During that same period, the Eurosystem conducted another programme in support of covered bonds (CBPP2) but its size remained comparatively modest (some EUR 40 bn.), in line with the size of the corresponding market. In February 2012 the SMP was directed at the purchase of private and public debt instruments issued in the countries under market pressure. When it was terminated in September 2012, the SMP had absorbed some 220 bn. of debt securities, mostly issued in Southern Member States (Table 1). The innovation consisted in targeting crisis countries and in purchasing the debt instruments at market prices instead of using them as collateral for loans.

Table 1: SMP: Breakdown by Country

Ireland	14.2
Greece	33.9
Spain	44.3
Italy	102.8
Portugal	22.8
Total	218.0

Source: ECB.

Finally, the most innovative action is the Outright Market Transactions (OMT) programme announced in June 2012 and finalised in September. This programme in effects commits the Eurosystem to buy *unlimited* amounts of public debt securities of euro area Member States that face excessive interest rates. The commitment is both vague – when is the interest rate excessive? – and conditional as OMT are reserved for countries under a EU-IMF programme. Yet, it represents a massive innovation because of its *de facto* unlimited nature.

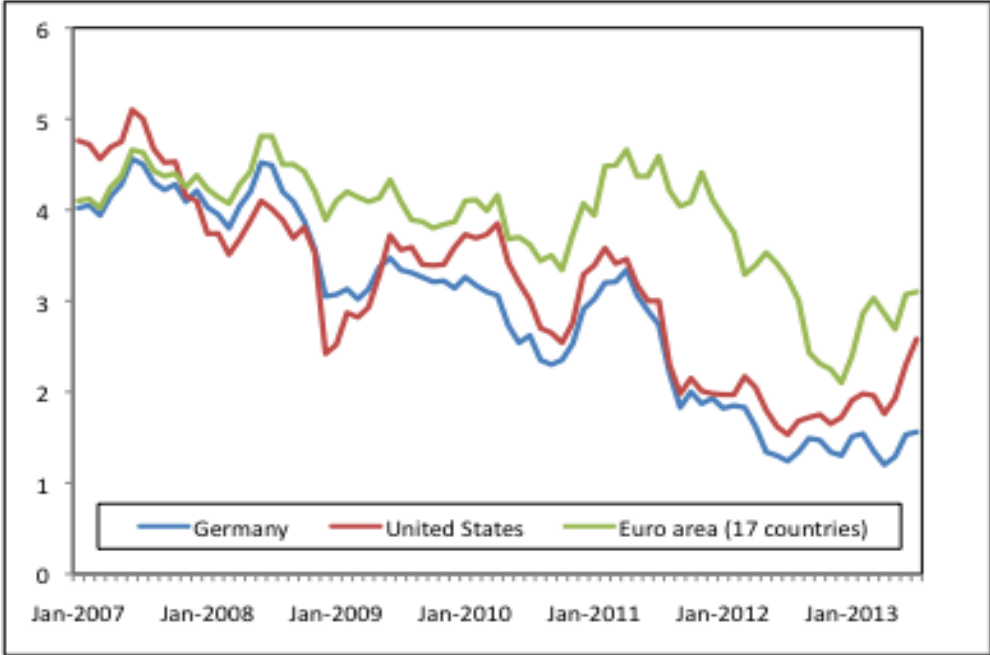
2.3. Comparison of the US and euro area policy actions

There are important differences between non-standard policies in the US and in the euro area. The first one is forward guidance, which was practiced fairly early on by the Fed while the ECB is only now gradually warming up to the idea. Second, the sizes of liquidity provision measures differ. The Fed absorbed some USD 2400 bn. of assets in comparison with EUR 1400 bn. for the Eurosystem. Third, The Fed explicitly tried to lower long-term interest rates, which the ECB did not. Fourth, the ECB insisted that its LTRO and SMP actions would be entirely sterilised, which the Fed did not do.

These differences reflect sharply different objectives. The Fed first wanted to support the financial system, hence QE1, but then shifted to try and adopt an expansionary stance while the interest rate was at the zero lower bound. The Eurosystem too wanted initially to support the financial system but never stated any intention of using non-standard measures to conduct an expansionary policy. Once the sovereign debt crisis started, all non-standard operations were motivated by the Eurosystem's desire to "safeguard an appropriate transmission mechanism" for its standard monetary policy, i.e. via the policy interest rate.

As is well known, with the emergence of the sovereign debt crisis national interest rates started to diverge within the euro area. This implied that the credit conditions that represent the traditional channel transmission of monetary policy became sharply different, as Figure 2 illustrates. The figure plots the average of euro area interest rates and the German interest rate on long-term (10Y) government bonds. It shows that the German interest rate declined in tandem with the US rate, but for the euro area as a whole the interest rate remained significantly higher. Obviously, the ECB was right to focus on the spread, which indeed hampered a proper transmission of its policy. It did so by increasingly focusing its non-standard actions on the crisis countries through the LTRO and SMP. The OMT was the last and most successful step.

Figure 2: Long-term (10 years) interest rates



Source: *Economic Outlook*, OECD on line.

Focusing on German rates, Figure 2 also suggests that the systematic sterilisation of its liquidity provision measures did not hamper the Eurosystem’s ability to bring long-term rates down.

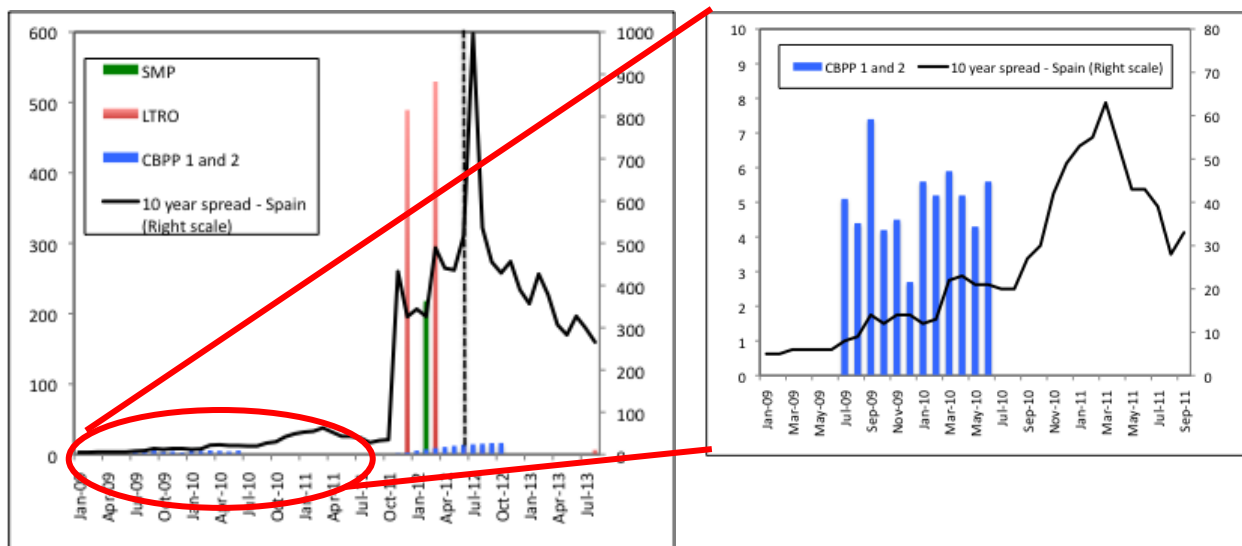
3. EURO AREA ISSUES

3.1. Which measures worked?

Like other central banks, the ECB has experimented with different types of non-standard measures as described in Section 2.2. These actions are shown in Figure 3. Also shown is the spread of Spanish 10-year bonds over the German 10-year bonds. Spanish bonds are used to represent the deterioration of the crisis; using other spreads would not invalidate the following discussion.

The figure shows that the CBPP interventions were trivially small. They may have improved a small segment of financial markets but, clearly, they were irrelevant as far as the sovereign debt crisis is concerned. The right hand-side chart, which displays the early period using a different scale, confirms that CBPP1 was ineffective outside the narrow confines of a particular – and not very important – market segment. The SMP and LTRO were on a different scale, actually comparable to the Fed’s actions. Yet, their impact on the spreads were at best temporary; if the objective was to durably restore the channel of monetary transmission, these measures did not deliver. The OMT programme was announced informally in June 2012 and formally presented in September. The spread peaked in July and started to decline rapidly in August. So far at least, the OMT has worked.

Figure 3: Non-standard policy measures en their effect on the Spanish spread



Notes: The bars represent the amounts of liquidity, in EUR billion, injected by the Eurosystem in its non-standard operations. The curve describes the evolution of the spread of Spanish 10-year bonds over the corresponding German bonds, in basis points. The dotted line corresponds to June 2012, when the first indication of OMT was given.

Sources: Non-standard measures: ECB; Spreads: Financial Times.

It might seem illogical that EUR 1,400 bn. of liquidity injections failed where a mere statement by the ECB succeeded, without any expenditure so far. As argued in my Note of December 2011 (Wyplosz, 2011), this was entirely predictable (and desirable). The explanation lies in one word: unlimited. In conducting its LTRO and SMP actions, the ECB had always taken great care to indicate that they were exceptional and limited. The reactions of the financial markets were easy to anticipate: they would retreat temporarily in the face of purchases of debt securities that were large enough to move the market, but because limited actions are always smaller than the stocks of debts, it was only a matter of

time until the crisis would become acute again. On the other hand, the OMT announcement meant that the Eurosystem was determined to backstop *all* of the existing debt instruments, under some conditions as noted earlier. Given the unique ability of a central bank to buy whatever amount of securities that it wishes, the announcement was credible. In contrast, the previous insistence of the ECB that its actions were limited effectively undermined what the central bank was intending to achieve.

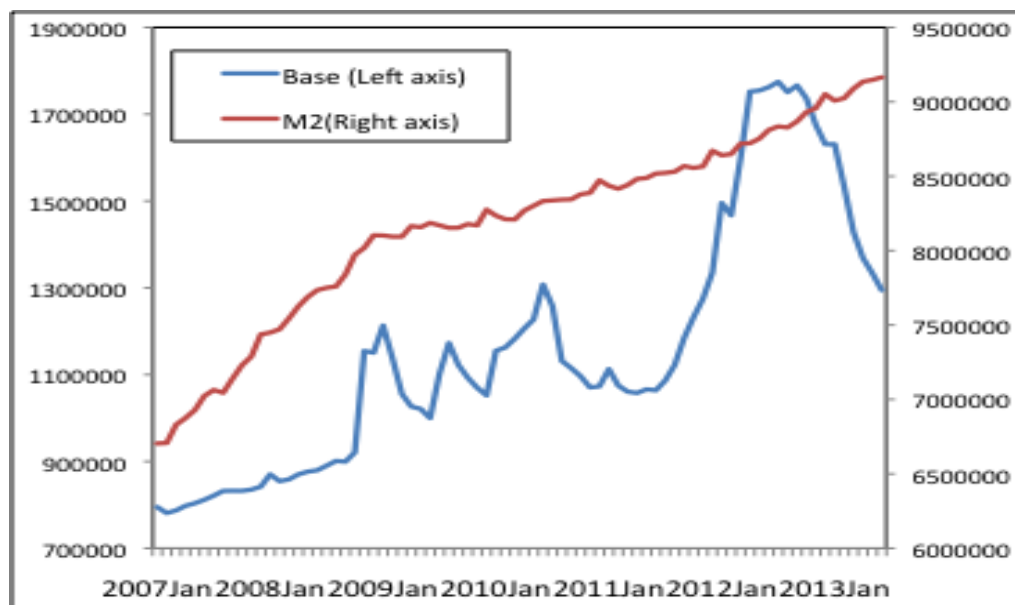
3.2. Risks

The OMT programme has radically improved the situation but it remains untested – there has been no OMT intervention so far – and criticised for implying some heavy risks. Three risks are often mentioned, none of which is valid while one risk is infrequently debated.

3.2.1. Inflation

If invoked in the case of large countries such as Italy and Spain, OMT could lead to large amounts of liquidity injection. The fear is that such injections would be too large to be sterilised so that the money stock would rise and produce rapid inflation. Each step of this reasoning is problematic, however. Even if liquidity creation is not sterilised so that the money base increases, the overall money stock (measured as M1, M2 or M3) does not follow passively. For any of these aggregates to rise, bank credit must grow (since bank credit is the main component of M1, for instance). Not only is bank credit generally anaemic currently, but the national authorities dispose of many regulatory instruments to keep control of bank credit, and so does the Eurosystem with reserve requirements.³ It is true that, in normal times, overall money supply and the money base rise in tandem. But these are not normal times, as Figure 4 shows. Since the adoption of non-standard policy actions, the link between the money base and M2 has essentially dissolved. In fact, in spite of sharp increases in the monetary base since 2008, the growth rate of M2 has slowed down, precisely because banks have rarefied credit.

Figure 4: Money base and M2 in the euro area (EUR mn.)



Source: ECB.

³ The Irish and Spanish authorities did not prevent fast credit growth in the 2000s, an oversight failure that is responsible for the subsequent crisis. Since then, the European Systemic Risk Board (ESRB) has been created precisely to avoid further failures. For more info, see <http://www.esrb.europa.eu/home/html/index.en.html>.

The second step in the reasoning invokes the historical link between money growth and inflation. The link is by no means automatic, however. It operates as follows. Monetary base growth leads to credit growth, which fuels demand for goods and services, which leads to more economic activity, which leads to strong demand for labour and goods, thus triggering a wage-price spiral. Once again, this is true in normal times, not in the current recessionary environment. In fact, inflation is currently low in most countries.

3.2.2. Asset prices

Low interest rates in the 2000s produced asset price bubbles in a number of countries such as the US, the UK, Ireland or Spain. Is there a risk of this happening again and thus sowing the seeds of the next financial crisis? Once again, low interest rates, even very low ones do not mechanically lead to asset price bubbles. Once again, we need to have credit growing fast to allow investors to borrow from banks and invest in assets and houses. And once again, credit is currently not growing fast enough to sustain a strong economic recovery. As noted, instruments to prevent credit from growing excessively fast exist.

3.2.3. Conditionality

The OMT announcement has had a massively positive effect, but the measure has not been used and therefore tested. How do we know that, if invoked, the OMT will work, and will do so without adverse side effects?

The most worrisome aspect is the pre-announced conditionality. What happens if a country faces a bank crisis? Spreads on its public debt will promptly rise and banks will instantly lose market access, as will the government if it is already highly indebted and subject to some market pressure. If the country is large, the ECB will be the only source of urgently needed stabilising support, as befits a lender in last resort. There will be no time to negotiate the kind of elaborate programme identified as a condition for OMT. The ECB will have to choose between breaking its conditions and lose its credibility (and therefore the OMT protection would vanish), and letting the country's banking system collapse, which would probably lead to a default of the government itself. This would be an impossible situation for the ECB to be in and, yet, it is a distinct possibility.

3.2.4. Low interest rates

There is also the concern that the strong and prolonged monetary stimulus may delay this rebalancing process as it reduces bank's incentives to deal with impaired assets. This concern is misplaced for two main reasons. First, the OMT programme does not reduce interest rates throughout the euro area; it only aims at reducing interest spreads in the Member States currently in crisis, where they are arguably much too high. The ECB may well raise its policy rate to deal with this risk, in which case the OMT programme would be even more necessary to shield the crisis Member States. But keeping interest rates low is not the major source of disincentives toward bank restructuring. Bank restructuring is being encouraged in some Member States by forbearance. What is badly needed is to conduct rigorous stress tests, as was done in the US three years ago. In principle, the ECB will conduct an asset quality review, meaning stress tests, early in 2014 before it assumes its role as Single Supervisor. If properly done, this review should lead to a proper cleansing of bank balance sheets.

3.3. What else is to be done to support a recovery?

At the zero lower bound, monetary policy is largely powerless. Early studies of QE in the US accept that the Fed did affect long-term interest rates but remain ambiguous on whether it exerted a significant impact on growth (Christensen and Rudebusch, 2012; Pesaran and Smith, 2012). In the euro area, the Eurosystem only reduced the spreads, and therefore reduced long-term rates, when it adopted the untested OMT programme.

Should the OMT programme aim at eliminating the spreads? This would require a 100 % guarantee on public debts, in contrast with the current limited and vaguely formulated guarantee. The perception is that this would be a far too costly and risky for the ECB to contemplate. Pâris and Wyplosz (2013) propose a solution that would indeed eliminate the spreads and thus fully restore the transmission mechanism and provide a significant boost to growth in the crisis countries. It involves the explicit acquisition and forgiveness by the ECB of portions of excessive public debts. The mechanism is designed to amortise the losses over a very long period. Of course, such an approach cannot be the ECB's own decision because it would imply a transfer from all euro area countries to the over-indebted governments.

The dark scenario of a bank crisis would be much less likely if euro area banks would have been cleansed, as in the US. In spite of official reassurances that this step has been completed, there is indirect evidence that many banks remain fragile, as noted in IMF (2013). The measures to be taken do not fall under the ECB responsibility, however.

4. CONCLUSION

There are many types of non-standard monetary policy measures, each with different objectives. Some are structural in nature, designed to alleviate pressure on particular market segments. They have been effective, if only because the resources of a central bank are effectively unbounded. Other measures have a macroeconomic objective; they are intended as a new instrument when the interest rate is trapped at the zero lower bound. Their effectiveness remains in doubt but they are well worth trying as long as adverse effects are not identified; so far, no such adverse effect has been convincingly identified.

The Eurosystem is facing a particularly daunting challenge as it faces a mix of macroeconomic and "sectoral" distress: it is sectoral in the sense that individual member countries with highly indebted governments face much higher interest rates than the other member countries. This does not just break the transmission mechanism down, it also imparts a powerful contraction effect on the macroeconomies of the affected countries. Being structural, this situation can be treated by the central bank if it mobilises sufficient resources. But affecting some countries and not others, this situation requires that the central bank transfer income across countries, exactly like it transfers resources from national taxpayers to national distressed sectors. Limited actions like the SMP and LTROs have failed to reduce the spreads. Potentially unlimited action like the OMT has succeeded but the spreads remain large and volatile.

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DIRECTORATE GENERAL FOR INTERNAL POLICIES
POLICY DEPARTMENT A: ECONOMIC AND SCIENTIFIC POLICY

Can unconventional Monetary Policies ensure the stability of the euro area?

Daniel GROS
with Cinzia ALCIDI and Diego VALIANTE

NOTE

Abstract

Unconventional monetary policy tools have become standard as interest rates remain close to zero and monetary policy transmission channels do not yet function fully in the euro area. Their effectiveness is limited, however, not because of design failures, but because the underlying problem must be solved with different policy instruments.

In times of crisis the resort to non-standard monetary measures can be effective by at least preventing a generalised meltdown of the system. The OMT is a good example in this respect. It was crucial when it was announced. Yet, the stability of the euro area cannot be ensured by monetary policy.

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LIST OF ABBREVIATIONS

DSGE	Dynamic Stochastic General Equilibrium
ECB	European Central Bank
EFSF	European Financial Stability Facility
ELA	Emergency Liquidity Assistance
EMU	Economic and Monetary Union
EONIA	European Over Night Index Average
LTRO	Long-Term Refinancing Operations
MRO	Main Refinancing Operations
NCB	National Central Bank
OMT	Outright Monetary Transactions
SMP	Securities Markets Program
SSM	Single Supervisory Mechanism

EXECUTIVE SUMMARY

As the policy interest rate has remained close to the zero lower bound and the proper functioning of the euro area financial markets has not been restored yet, the use of unconventional monetary policy tools has become a standard practice of the ECB during the last 5 years. Its effectiveness on the real economy is, however, being limited not because of design failures, but because the underlying problem, namely financial instability across EMU (Economic and Monetary Union), must be solved with different policy instruments.

The Committee had put forward three issues; here we try to address each of them shortly on the basis of the findings of this note

1. *Assess the current stance of the effectiveness of the different non-standard monetary policy tools in the euro area (other Member States not considered).*

Probably of limited effectiveness in stimulating the broader euro area economy, not because of bad design, but because lower interest rates might have unintentionally the opposite effect of what is expected: they reduce income of the net lenders (Northern EMU countries) and the lower interest rates do not reach the net borrowers (Southern EMU countries).

The transmission channel of monetary policy remains still partially impaired and the interbank market remains less than fully functional as evidenced by the high level of Target II balances which persist (albeit declining slowly).

2. *What are possible unintended consequences of these measures in the current context of weak economic activity and subdued growth going forward? Do you see risks for price stability and asset price developments?*

There is no risk for price stability. The main risk concerns losses on lending by the ECB, especially its Emergency Lending Assistance (ELA) programme, which might lead to re-distribution of income (or rather the fiscal burden) across euro area Member States. However, losses would arise only under an extreme scenario of policy inaction or mismanagement in the peripheral countries.

3. *What other tools/instruments could the ECB use in order to stimulate the economy in the euro area?*

The ECB could impose a negative interest rate on banks' deposits to discourage banks in Northern EMU countries from keeping their excess funds unused and induce them to start lending again directly to Southern EMU countries.

1. INTRODUCTION

Over the last decade central banking has neglected the role of the financial system and the importance of the structure of the demand of money. By contrast, if one takes a long-term view, much of what is considered today 'non-standard' would appear rather 'conventional' by the standards of central banking before the 'modern' era.

It was mainly during the 'Great Moderation' which was characterised by liberalised financial markets and a generally accommodative macroeconomic policy that the 'modern' canon for central banking arose.¹ The basic framework assumed that by controlling the (path of) short term interest rates, central banks could control the money supply. The details of the transmission mechanism of monetary policies to the real economy were of little interest. The models used by central banks to estimate the impact of their policy on the economy belonged (and still belongs in many cases) to the class of the so-called DSGE (Dynamic Stochastic General Equilibrium) models² which describe an economy as a representative agent behaving according to the rational expectation hypothesis. This implies that unless frictions are assumed financial intermediation does not play any role in the economy. Default is not contemplated as it is not consistent with the description of the equilibrium. Therefore, bankruptcy costs and endogenous risk premia are absent. In short, real capital markets are not well featured in this kind of models, likewise the frictions which emerged once the crisis started.

In this world, monetary policy consisted of setting a policy rate, which usually did guide the overnight rate and the setting of the policy rate was supposed to be used to achieve an inflation target, allowing only for some temporary feedback from the real economy (according to the so called Taylor rule)³. By controlling the overnight interest rate through action on money supply (plus anchoring long-term inflation expectations) was considered sufficient to drive the stock of money in and outside the financial system.⁴

As long as standard tools were sufficient to affect the overnight interest rate (short-term) the only task for the central banks was to preserve price stability. Expectations that the policy rule of the central bank would continue to apply in the future then ensured that changes to short-term rates would be transmitted along the yield curve of sovereign bonds and private asset classes, such as loans (IMF, 2013). The rest of this paper is structured as follows. Next section points to the conditions under which conventional tools fail to deliver and the resort to unconventional measures is deemed necessary. Section 3 provides a review of the unconventional tools used by the ECB with particular emphasis on the OMT.

¹ See for instance Padoa-Schioppa 2004a, 2004b.

² See for instance Gali (2008).

³ See Taylor (1993).

⁴ More technically standard monetary policy tools are defined as those allowing a pre-defined target of money supply to expand/restrict the balance sheet of a central bank to meet an underlying inflation target. These tools are: nominal interest rates (expectations of money supply); standing facilities (to provide and absorb overnight liquidity and to signal the general monetary policy stance), which, in turn include the deposit facility and the marginal lending facility (to align interbank interest rates to nominal rates, with the interest rate on the deposit facility (resp. marginal lending facility) providing a floor (resp. a ceiling) for the overnight market interest rate); open market operations (to provide liquidity to Monetary Financial Institutions (MFIs) with maturity from 1 week (main refinancing operations or MROs) to 3 months (longer-term refinancing operations or LTROs)). MROs serve to steer short-term interest rates, to manage the liquidity situation, and to signal the stance of monetary policy in the euro area, while LTROs aim to provide additional, longer-term refinancing to the financial sector; and reserve requirements (to pursue the aims of stabilising money market interest rates, creating or enlarging a structural liquidity shortage and possibly contributing to the control of monetary expansion.). The ultimate objective of standard tools is to anchor inflation expectations to medium-term target while ensuring the well-functioning of the transmission mechanism. For more information see also

<http://www.ecb.europa.eu/mopo/implement/intro/html/index.en.html>.

Section 4 is devoted to understand the functioning of the interbank market and the 'unconventional' role played by the ECB during the last two years. Last section concludes.

2. THE FAILURE OF STANDARD MONETARY POLICY TOOLS

Already long ago before the eruption of the crisis and even before the creation of the ECB, Folkerts-Landau and Garber (1992), asked whether the ECB was going to be a central bank undertaking traditional functions of financial banking supervision or just a 'glorified' monetary policy rule with the single objective of price stability. In the paper they emphasise that standard monetary policy tools, and hence rules, stop working when financial markets freeze and risk premia escalate to the point that systemically important institutions can no longer finance themselves and put the entire financial system in jeopardy.

Another circumstance when standard monetary policy tools are no longer sufficient is when the policy interest rates hit the lower bound of zero. The problems which arise in that setting are slightly different from those that arise when financial markets no longer work properly. Even when short term interest rates are zero, longer term interest rates can remain high. Under this condition the central bank's main task becomes to influence long-term rates. One way to do so is to persuade markets that short term policy rates will stay low for a very long time (forward guidance). Another way is to engage in purchases of long-term government securities (usually government bonds), called 'quantitative easing'. Both of these measures are now called 'non-standard'.

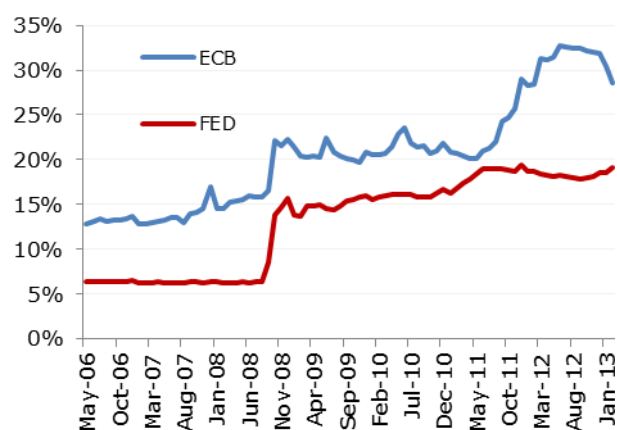
Since in practice most non-standard monetary policy measures involve the use of the balance sheet of the central bank⁵, the time path of the balance sheet usually provides indications of the resort to such instruments. Indeed the massive use of non-standard measures on both sides of the Atlantic has resulted in a large expansion of the balance sheets of both the ECB and the US Federal Reserve (Fed). However, there is one important difference: The balance sheet of ECB was expanding (as percentage of GDP) already well before financial crisis. This was the result of the combined effect of the increase in cash after the introduction of the euro as well as a side effect of the credit boom on banks' reserves⁶. By contrast, the balance sheet of the Fed had remained a rather small, constant proportion of GDP. As illustrated in Figure 1, since the crisis broke, both balance sheets (in proportion of GDP to make them comparable) have expanded by a multiple.

⁵ There is some discussion among policy makers and the literature on what is 'unconventional'. Borio and Disyatat (2010) define them as actions where the central banks actively use its balance sheet to affect directly market prices and conditions beyond the short-term [overnight] interest rate.

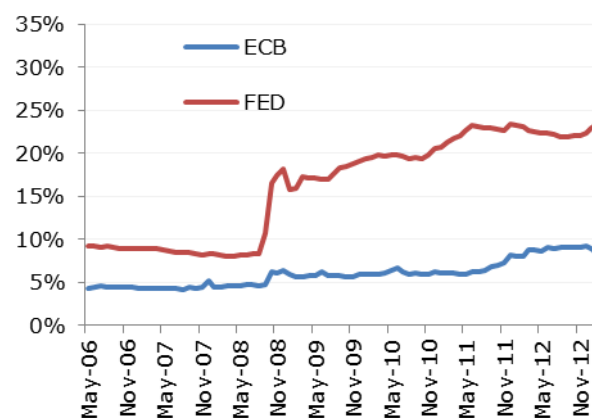
⁶ Reserve requirements are much larger in the euro area than in the US.

Figure 1: ECB and FED Balance Sheets

Panel a. Central banks' total assets/liabilities as % of GDP



Panel b. Central banks' total assets/liabilities as % of banks' assets/liabilities

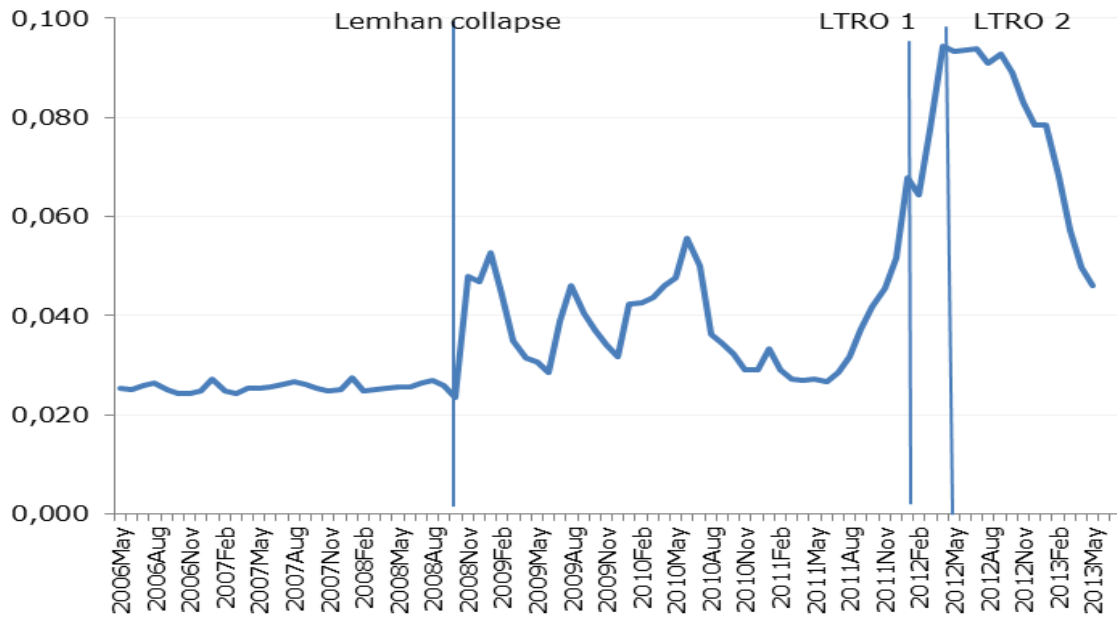


Source: ECB, Statistical warehouse and Flow of Funds.

The ECB has often been criticised as not having used its balance sheet aggressively. In part this criticism was based on the observation that the percentage increase in the balance sheet of the ECB was somewhat smaller than that of the Federal Reserve. But if measured as a ratio to GDP (as one in panel a of Figure 1), the ECB has been more active than the Fed. However, the banking sector is much larger in the euro area than in the US. The impact of the unconventional operations of both central banks might thus have been larger in the US because, as illustrated in panel b of Figure 1, the balance sheet of the Fed is now close to 25 % of the balance sheet of the entire US banking system whereas the balance sheet of the ECB amounts to 'only' 10 % of the balance sheet of the banking system of the euro area.

Another circumstance under which standard monetary policy tools fail to work is when the money multiplier becomes variable and unpredictable. The money multiplier relates the so-called monetary base, i.e. the balance sheet of the central bank, to the stock of money; in the euro area this means mainly the broad money aggregate, i.e. M3. In normal times, the monetary base is at a stable order of magnitude, smaller than the broad money supply (i.e. the money multiplier is large up to 15) and any expansion of the balance sheet of the central bank results in an expansion of the money supply of the same proportion. A more volatile ratio may signal uncertainty and potential dysfunctions in the financial system. When this is the case and the rate of expansion of the monetary base decouples from the broad money aggregate, lending to private sector and other financial transactions are no longer tightly linked to the balance sheet of the central bank.

Figure 2: Monetary base (minus cash) relative to M3 (1999-2013)



Source: ECB.

Note: We took cash out of the base money to remove the effect on volatility associated with the introduction of the euro.

Figure 2 provides evidence of how the ratio of monetary base to M3 has become instable at the inception of the financial crisis (with the Lehman Brothers' bankruptcy) and remained since then quite volatile, as the euro area's financial system remains impaired.

3. ECB UNCONVENTIONAL MONETARY POLICY TOOLS

Since the start of the crisis in the summer 2007 the ECB has profoundly changed its tool kit. Among the tools currently available:

1. Fixed rate, full-allotment liquidity provision;
2. Collateral rules;
3. Long-term liquidity provision;
4. Outright assets purchase.

Fixed rate with full-allotment liquidity provision: Under this procedure, banks can have unlimited access to ECB liquidity at a fixed rate in exchange of collateral (with a haircut). This seemingly minor change has a profound implication: the ECB's balance sheet is now driven by the demand of banks for funds. This implies that the ECB's balance sheet can expand and contract depending on the functioning of the interbank market. Risk aversion or abnormal liquidity preference by euro area banks will lead to an expansion of the ECB balance sheet. An increase in fragmentation, by which banks in core countries refuse to lend to banks in other countries because of perceived counterparty risk, will lead to increased central bank intermediation and also expand the balance sheet of the central bank (and vice versa).

This also implies that any talk about 'sterilisation' of other measures is misleading because full allotment operations can undo any sterilisation operation.

Profound changes in collateral rules: At the outset of a crisis the ECB had a simple eligibility threshold for government debt. This had to be abandoned when the rating of Greece government debt went below this level. At present the ECB applies a complex sliding scale of haircuts, accepting more risky securities as collateral, but protecting itself with higher haircuts. On balance this should not necessarily increase the risk of losses.

Long-term liquidity provision: Normally a central bank provides only short term liquidity (at most a few weeks). But with the 36-month Long Term Refinancing Operations (LTRO) the ECB provided *de facto* medium term financing to banks.

Outright purchases of specific debt securities in the open market: This tool was initially used in June 2009 under the so-called Covered Bond Purchase Programme (CBPP), according to which the ECB could buy a limited amount (EUR 60 billion) of euro-denominated covered bonds to ease funding conditions for both credit institutions and enterprises.⁷ This represented the first resort to this form of non-standard monetary policy tools by the ECB. In May 2010, at the peak panic of a possible Greek default, the governing Council decided to start the Securities Markets Programme (SMP). The objective stated by the then ECB President Trichet was to "address tensions in certain market segments that hampered the monetary policy transmission mechanism"⁸ through the purchase on the secondary market (i.e. from banks and at market prices) of securities that are usually accepted as collateral, more specifically, sovereign bonds of distressed countries. Indeed, the monetary policy mechanism also depends on the existence of well-functioning government bond markets, which are used as benchmark for the pricing of other assets and sovereign markets had broken down in these countries at that time.

⁷ A second programme (CBPP2) for a total amount of 40 billion was launched in November 2011.

⁸ See: <http://www.ecb.europa.eu/mopo/liq/html/index.en.html#portfolios>

The last SMP purchases took place in February 2012 and the programme was terminated in September 2012. The SMP lacked transparency: Neither size nor length of the programme (it was simply stated that it was temporary in nature), nor the criteria of the purchases were announced in advance. The ECB only published the amount of the purchases on weekly basis without unveiling the country issuer or the maturity. The justification given by the ECB was that more transparency would have given an advantage to the speculators it was fighting. Eventually, in February 2013, details about holdings of securities purchased under the SMP were published several months after it had ended (and after the announcement of the OMT). Data on weekly purchases suggest that in 2010 the ECB had embarked on market intervention intermittently buying substantial amounts of government bonds of smaller peripheral euro area countries (see Alcidi et al. (2012)). Table 1 shows the breakdown of the Eurosystem's SMP holdings as of 31 December 2012, per country of issuer, indicated at nominal value, book value and average remaining maturity.

Table 1: ECB holdings under SMP

Issuer country	Outstanding amounts		Average remaining maturity (in years)
	Nominal amount (EUR billion)	Book value* (EUR billion)	
Ireland	14.2	13.6	4.6
Greece	33.9	30.8	3.6
Spain	44.3	43.7	4.1
Italy	102.8	99.0	4.5
Portugal	22.8	21.6	3.9
Total	218.0	208.7	4.3

Source: ECB.

Note: The SMP holdings are classified as held-to-maturity and consequently valued at amortised cost.

The SMP was controversial from the start.⁹ It was *de facto* suspended once the European Financial Stability Facility (EFSF) had been set up. The purchases of Greek government bonds remained particularly controversial given the subsequent *de facto* default of that government. The ECB avoided any losses on its holdings of Greek government bonds only because it was excluded from the 'private sector involvement'. But this had to be financed *de facto* by the EMS programme. The SMP was briefly re-activated in the summer of 2011 when the risk premia on Italian and Spanish government bonds increased strongly with the ECB buying large amounts in a relatively short time. In the case of Italy the ECB even took the unprecedented step of sending a letter to the Italian government outlining the structural reforms and the fiscal adjustment it expected to be taken. However, this attempt

⁹ By contrast, the covered bond buying programme had been approved unanimously. At that time Germany and Spain were by far the countries with the largest amounts of covered bonds outstanding. In principle the banking systems of these two countries were the biggest beneficiaries or potential beneficiaries of the programme.

to impose some 'conditionality' in the context of the SMP programme is widely perceived as having failed.

3.1. Outright Monetary Transactions

In August/September 2012 the ECB announced the details of the OMT, a programme to purchase sovereign bonds on secondary markets "to safeguard an appropriate monetary policy transmission and the singleness of the monetary policy"¹⁰.

At first, the OMT appeared as a continuation of the SMP, but when in the September meeting, Mario Draghi described the technical features of the OMT, he highlighted the differences and the intent of the Board to be much more transparent than in the past. In contrast to the SMP, the activation of the OMTs requires the country to apply for an appropriate EFSF/ESM programme which includes strict conditionality. This is seen as a condition in order to preserve the ECB price stability mandate¹¹ and avoid moral hazard issues. Other differences relate to more technical aspects: only bonds with maturities of one to three years can be bought under the OMT¹²; for bonds purchased under the OMTs, the ECB will enjoy the same (*pari passu*) treatment as other creditors. This was not the case under the SMP. Indeed on the occasion of the restructuring of the Greek sovereign debt, ECB holdings were paid at par. However, the profits on such holdings were then redistributed to Greece.

The key difference for many is that OMT purchases are explicitly *ex ante* unlimited. By stating this feature explicitly the ECB wanted to underline its determination to prevent a breakup of the euro area.

The ECB has not yet engaged in any Outright Monetary Transactions (OMT), and there is at present little prospect it will have to do so in the near future. Nevertheless the OMT is widely regarded as the most important non-standard monetary policy instrument in the tool kit of the ECB and is credited with having saved the euro area from disintegration.

However, upon closer inspection, a rather different picture emerges. The condition that the ECB would start buying only if the country has applied to the European Stability Mechanism (ESM) for a programme requires the assent of the governments and/or the parliaments of the Member States which finance the ESM. The ESM programme usually comes with heavy policy conditionality. From this point of view, OMT could be regarded as a sort of conditional SMP.

A further fundamental difference between the SMP and the OMT is in the fact that OMT is reserved to countries that still have market access¹³. This means that were a country to be in a similar situation as Greece in April 2010, when it had lost market access, the OMT could not be activated. The reason for this condition is that lending to (buying bonds of) insolvent governments is no longer monetary, but fiscal policy. However, this condition is likely to be tested in a real emergency. The purpose of the OMT is to counter speculation on the break-up of the euro area. But even if a country has an ESM programme speculation

¹⁰ http://www.ecb.europa.eu/press/pr/date/2012/html/pr120906_1.en.html.

¹¹ Like for the SMP, it is foreseen that the liquidity created through OMTs would be fully sterilised in order to discard any future impact on inflation. Yet, in a context of full allotment procedures of banks' refinancing this is meaningless as the ECB anyway does not control the size of its balance sheet.

¹² Despite no limitation in the maturity was explicitly stated for the SMP, the maturity of government debt securities purchased under the SMP was on average around 4 years.

¹³ This is implicitly stated in the technical feature so the OMT when it comes to the coverage "They may also be considered for Member States currently under a macroeconomic adjustment programme when they will be regaining bond market access" (http://www.ecb.europa.eu/press/pr/date/2012/html/pr120906_1.en.html) and has been emphasized by many commentators then after.

that the country is about to leave the euro area can arise. The government of the country in question could then probably no longer sell its bonds in the market. This implies that the OMT could not be activated – and would thus not be able to fulfil its mission to counter speculation on the break-up of the eurozone.

It remains true that the OMT had a large impact through the announcement effect of an explicitly potentially unlimited intervention of the ECB on the sovereign bond market at the time of severe tensions on such market segment.

Yet in reality, the SMP also did not have any *ex ante* limitations on the quantity the ECB could buy, the programme was supposed to be temporary, but this formulation did not put any explicit limit on the duration of the SMP. If anything the limits of the OMT are in reality more binding than for the SMP. As the supply of government bonds with maturities of less than 3 years is limited and large amount of them are held by banks and used as collateral in refinancing operation, the true meaning of 'unlimited' in this context means all the outstanding¹⁴ short term bonds of the country(ies) in question. This implies that even if the OMT had to be used for both Italy and Spain it would probably still be a fraction of the balance sheet of the ECB today.

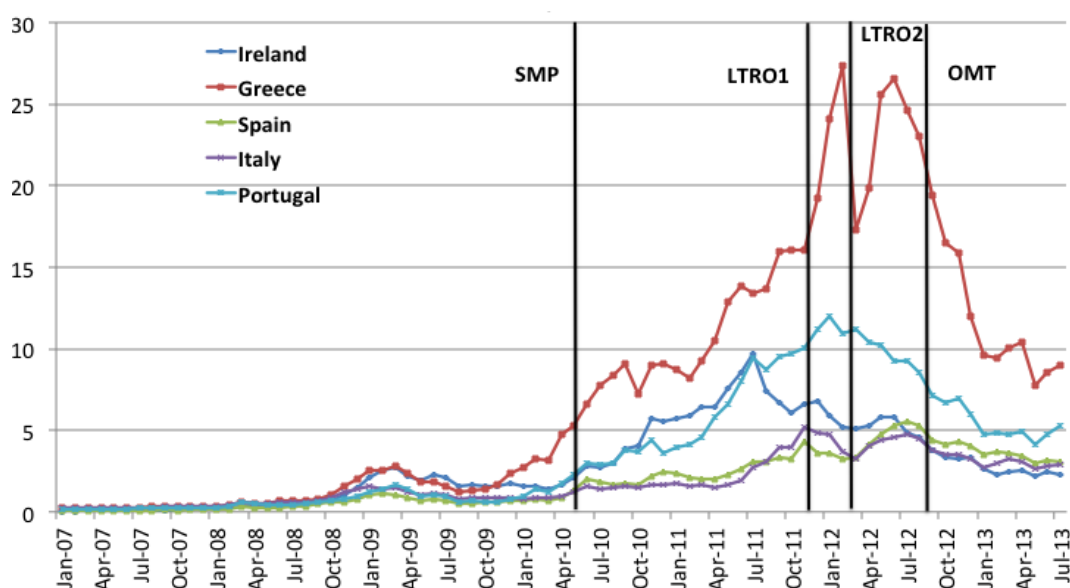
¹⁴ In order to avoid any circumvention of the limitation to short-term maturities, the ECB has explicitly stated that it would 'monitor' the maturity structure of new issuance by governments under this programme. Any country in need support via the OMT would also have an ESM programme. The latter would presumably be used to finance any flow financing requirement resulting from an ongoing deficit.

4. ASSESSING THE EFFECTIVENESS OF NON-STANDARD MONETARY POLICY TOOLS

The effects of non-standard monetary policy tools are still under scrutiny by the economic literature. It may take years before we can have a final assessment of their broad implications. Currently, views are mixed. For instance, the LTROs have on the one hand provided emergency liquidity for banks, and so helped to avoid disorderly defaults and represented a relief for sovereigns. But, on the other, financial institutions have used this liquidity to increase their exposure to national governments, with only a very limited impact on the broader economy (Valiante, 2012). More generally, monetary policy tools, whether conventional or unconventional, are able to provide emergency liquidity but appear to be unable to redirect resources towards their optimal allocation.

One of the most important objectives of the unconventional tools is the ability to fix the transmission channels of monetary policy. As Figure 3 suggests, despite the SMP had minimal effects and LTROs unclear effects, OMT (with the announcement effect) managed to reduce banks reliance on ECB funding as the negative pressures on the economy slowed down and sovereign bond yields cooled down (in particular those with short maturities).

Figure 3: 10-year Government Bond Yields (2007-2013)



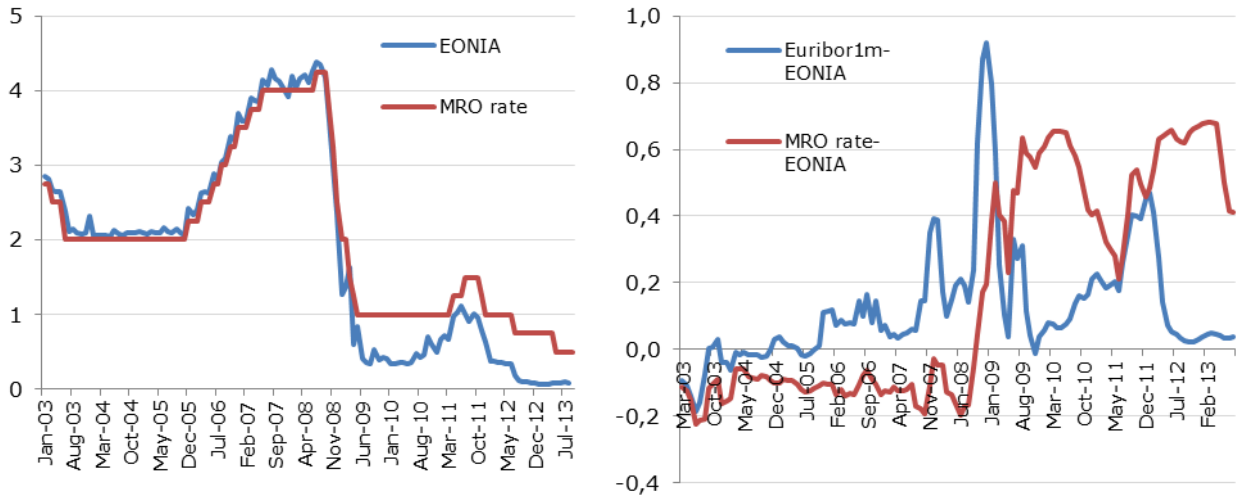
Source: ECB.

However, the transmission channels of monetary policy are still impaired, as the interbank market still strives to restart. These tools have hardly restored the situation. Policy interest rates no longer determine market rates. As explained above, central banks used to be able to guide (short term) market rates with their policy rates. As Figure 4 panel (a) shows, the riskless market rate (EONIA) used to track the rate for the MRO (Main Refinancing Operations) before the crisis, but this is no longer true. Similarly, while in quite times the spread of the Euribor over the EONIA is rather stable, the volatility has increased dramatically since the summer 2007 (panel b).

Figure 4: The policy rate and interbank interest rates (2003-2013)

Panel (a): Rate on main refinancing operations (MRO) & the overnight rate in the interbank market (EONIA)

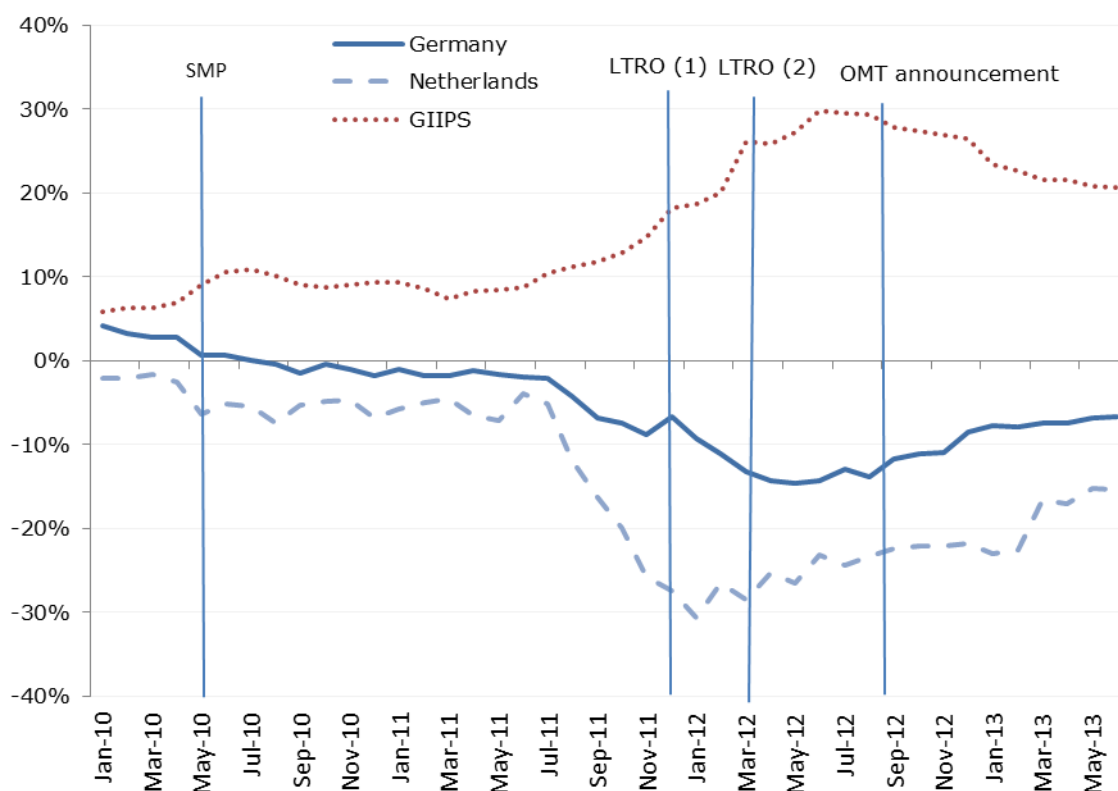
Panel (b): Differential in the interbank rates (Euribor-EONIA) and differential between policy rate and the interbank rate (MRO rate - EONIA)



Source: ECB.

Note: Panel (b) shows the moving average over 3 months.

While an interest rate on unsecured lending very close to zero may suggest the crisis is completely over, the interbank market remains impaired and interbank transactions take place only among solid institutions mostly located in core countries, while banks in the periphery remain isolated. These dynamics explain the still strong divergence between net lending among central banks, as illustrated by Figure 5. Financial institutions located in distressed countries strive to get liquidity in the interbank market and need to access ECB liquidity facilities, which act as a central counterparty.

Figure 5: Net Financing provided by the ECB (and the Eurosystem) to MFI's across the euro area, selected countries, % GDP, 2010-2013)

Source: ECB.

4.1. The saver's conundrum

In a nutshell, a fundamental problem of the euro area is that the market cannot be brought back into equilibrium when the savers are no longer willing to lend to those who would be willing to take these savings and when lower interest rates might induce some savers to save even more.

A fundamental problem for the ECB is that even if the cross border capital markets start to function again it is not clear that lower interest rates will be effective in leading to stronger demand. Indeed, low interest rates may in some case even have a negative impact on aggregate demand within the euro area. The reason for this is that lower interest rates reduce overall spending if the income effect dominates the substitution effect. A lower interest rate lowers the returns of savings and, therefore, non-labour income (income effect). On the other hand, a lower interest rate makes it also less interesting to save today, thus increasing the propensity to spend out of the income one has (substitution effect). For a net borrower both effects go in the same direction, supporting demand. But for a net lender with substantial savings, the income effect might well prevail over the substitution effect.

It is clear that this effect can operate only on agents with large asset holdings, whose return fall when the interest goes down. The corporate sector is typically not in this position, but the impact of lower interest rates on investment demand is always highly uncertain and likely to be limited when uncertainty is a major issue (Buti and Padoan 2013).

In the euro area one can identify the North (Germany and the Netherlands, among others) as a net lender and the South (Greece, Italy, Spain, among others) as a net borrower. As

the monetary transmission mechanism is impaired in the euro area, the ECB efforts to lower interest rates are transmitted only to the North, where short interest rates are effectively zero. This is why a combination of low interest rates in Germany and high risk premia for most of the rest of the euro area is so destructive. In particular, when the yield on German government bonds becomes negative in real terms, German savers must redouble their efforts to constitute their retirement plans. Lower interest rate can thus lead to lower consumption in Germany. However, lower ECB rates do not result in lower rates in the South. The higher risk premia which remain there force this part of the euro area to cut spending, thus reducing the demand for 'loanable funds'.

The efforts of the ECB to reduce interest rates to zero and persuade markets that they will be kept low for a long time might thus not have the intended effect of stimulating demand. On the contrary it might have led to weaker demand. For a while the euro area was caught in a spiral of ever-increasing risk premia in the periphery that hampered domestic spending there. But the capital flight to the surplus euro-area Member States, lead to negative interest rates in real terms, possibly inducing households to reduce their consumption there as well. But a weaker demand from the euro-area core made the adjustment in the periphery even more difficult. Fortunately, it now seems that this spiral is now moving in the opposite direction.

5. RE-PRICING CROSS BORDER LENDING IN THE EURO AREA: ECB AS CENTRAL COUNTERPART

A key difference between the euro area and the US is that lending between two banks located in two different Member States involves quite different risks than 'domestic' lending, i.e. lending between two banks in the same country. This is not the case in the US where the supervision of the financial system is federal. The fact that the state of California might be closer to bankruptcy than some euro area Member States has no influence at all on the credit rating of banks headquartered in California; and no influence on their ability to obtain funds on the inter-bank market. This is totally different in the euro area where any bank rescue depends on the fiscal strength of the bank's home country. Additional cross-border economic and legal barriers make this difference even starker.

During the credit boom years up to 2007 enormous cross border interbank claims built up because banks trusted each other, i.e. the returns of cross-border trading were actually higher than the direct and indirect costs. As the interbank market froze in 2008 due to inability to price each other credit risk, the situation worsened quickly. At that time, it was still assumed that all euro area member governments would be able to bail out their own banks but when the solvency of the government of the 'Southern' euro area Member States could be no longer considered as granted, the interbank market split along national lines. Banks in Northern EMU countries continued to lend to each other, but they stopped lending to banks in Southern EMU countries.

A sudden withdrawal of interbank funding has the same consequences as a bank run. A bank that suddenly has to repay its interbank debt has to cut credit to its own customers or engage in fire sales, which leads to large losses. This is exactly what happened when the interbank market froze after the bankruptcy of Lehman Brothers in 2008. And the same happened with the sovereign debt crisis came up in 2010/2011: a financial meltdown was avoided only because the ECB took on the role of the euro area's 'central clearing house' (as illustrated in Figure 5 above). This happened without much fanfare: German and other Northern European banks, which no longer trust their Southern counterparts, parked their funds at the ECB's deposit facility, whereas Southern European banks used the lending facilities of the ECB to substitute the private interbank funding they had lost.

The ECB represents still today the interbank market for short term lending and with the two rounds of LTROs (in late 2011 and early 2012) has also intermediated medium term funding. This was a crucial step, because banks are required to maintain a rough matching of the maturity of their assets and liabilities. Many banks would not have been able to continue operating only with the very short term funding the ECB had been providing hitherto. These operations have also increased cross-border exposures within the Eurosystem. To an even larger extent than before, the ECB took deposits from banks in savings surplus countries and lent to banks in borrowing deficit countries.¹⁵ This is reflected in the TARGET II imbalances that have attracted much attention. The key issue for the ECB is to understand whether its role as 'cross-border central counterparty of last resort' will prove to be temporary. The reduction in the Target balances shows that the situation is slowly improving, but the very high absolute levels show that the problem has not been solved yet.

¹⁵ The geographical distribution of the increase in the deposits at the ECB since the LTRO is clear: EUR 300 billion (60 %) came from German banks alone, with another EUR 100 billion from Dutch banks. The hundreds of billions of balances accumulated by German banks with the Bundesbank within the TARGET payment system reflect the same phenomenon.

Unfortunately, with the aim of containing risk, banking regulation is pushing banks to reduce their cross border exposure in response to the ratings downgrades of the periphery. Under the so-called standardised approach of Basle II of risk weighting, a downgrade in the credit quality of a loans held in the portfolio of bank implies a cost in terms of extra capital that have to set aside. Given the high cost of bank capital this translates into an increase of the effective cost of cross border lending. In practice, under current rules a downgrade from AA to BBB of a Spanish bank could imply an increase in the cost of borrowing from German bank of 2 percentage points. By contrast, the cost for the German of transferring the credit risk to the ECB is only 0.75 %, i.e. the spread between the lending and deposit rates of the ECB.

This might change now with the creation of the Single Supervisory Mechanism (SSM) because the ECB will not have the same incentives as national supervisors. Instead it will look at the overall liquidity situation of cross border banks. This shows how the need for an 'unconventional' monetary tool arose because of a combination of market panic and fragmentation of supervision. A structural change like the creation of the SSM might now eliminate the need for certain monetary policy instruments.

The creation of the SSM should eliminate the obstacles to cross border lending that national supervisors had created. But this might not be enough to re-start the recycling of the continuing surpluses in Germany and the Netherlands to the rest of the euro area. This means that the price mechanisms should also be used. In practical terms the only solution seems to be a negative deposit rate. The ECB could simply lower the deposit rate from zero to negative values. Maybe it could even announce that the rate would be progressively lowered until the ECB deposits would reach a certain level. When Germany's banks are faced with a substantially negative deposit rate at the ECB they might try to buy other German assets, driving the rate on Bunds even closer to zero. Sooner or later they will thus either have to resume lending to the periphery and invest in the rest of the world, or go out of business.

CONCLUSION

Unconventional monetary policy tools represent both a return to traditional model of central banking and a response of central banks to dysfunctional financial markets. In this respect the challenge faced by the ECB is particularly tough given the fragmentation of the euro area's financial markets along national borders. This fragmentation arose partially from a process of liquidity 'ring fencing' by national authorities. The unification of supervision under the SSM may thus address at least part of the problem. If the interbank market remains fragmented even after the establishment of the SSM, the ECB should consider using a conventional instrument in an unconventional way, namely to make the deposit rate negative. In this way the ECB could reinforce the incentive for banks to invest their funds where they are needed most.

The importance of the OMT for the longer term survival of the Euro is over-rated. The conditions attached to the OMT are actually more constraining than those of the SMP which it replaced. During times of panic an intervention like the OMT is needed, but in the long run the survival of the euro can only be ensured if the fundamental divergences that have arisen over the last decade are corrected.

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NOTES



DIRECTORATE GENERAL FOR INTERNAL POLICIES
POLICY DEPARTMENT A: ECONOMIC AND SCIENTIFIC POLICY

Non-standard and unconventional Monetary Policy Measures

Guillermo DE LA DEHESA

NOTE

Abstract

Big recessions or depressions, especially if they have been fuelled by a financial or credit bubble and burst, cannot be dealt with standard monetary policy tools. The ECB non-standard monetary policy measures - SMP, LTRO and, more recently, "unlimited" OMT and "forward guidance" on interest rates - have been instrumental to avoid a euro area break up, to fight against the perverse loop between banks and sovereigns and to establish more uniform lending conditions across euro area Member States. However, the narrow ECB mandate (price stability) and the absence of a macroeconomic target(s) for non-standard monetary policies weaken ECB commitments.

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EXECUTIVE SUMMARY

Big recessions or depressions, especially if they have been fuelled by a financial or credit bubble and burst, cannot be dealt with standard monetary policies consisting in raising or lowering short-term interest rates, even more so when policy rates are close to the lower bound (zero). Non-standard or unconventional monetary policies by central banks are needed in order to be able to face such extraordinary and serious events.

Key central banks, like the the US Federal Reserve (FED), the Bank of England (BoE), the Bank of Japan (BoJ) and the Bank of Canada (BoC) have undertaken unconventional monetary policies to avoid another Great Depression and have obtained reasonable good results. They did so before the ECB had been confronted with the financial crisis and the ensuing sovereign debt crisis. These unconventional measures represent other ways and means of fighting big recession once the lower bound for policy interest rate is reached or approached.

The ECB non-standard wrt unconventional monetary policies have specific features and several reasons explain the ECB initiative:

First, the ECB monetary policy is applied not to a country, as the FED in the US with its own Government and Treasury, but to 17 Member States of a Monetary Union with different Governments and Treasuries.

Second, the ECB's monetary policy has not engaged in quantitative easing (QE) as most other central banks have done through non sterilised purchases in the markets of long-term public and private financial assets. All non-standard measures have been sterilised by the ECB.

Third, the ECB monetary transmission mechanism is broken for several euro area Member States in distress, therefore, standard monetary policy is ineffective.

Fourth, as the ECB's main refinancing rate is approaching its "lower bound", credit markets are still fragmented and with evidence of a renationalisation of the capital flows, the ECB is forced to engage in another non standard measure, so-called "forward guidance".

All these ECB measures needed to be adopted in order to avoid a euro area break up, to fight against the perverse loop between banks and sovereigns and to restore the monetary transmission mechanism and more uniform lending conditions across euro area Member States.

INTRODUCTION

For several decades before the financial crisis, standard monetary policies of adjusting policy rates adopted by key central banks (FED, BoE, BoC, BoJ) succeeded in keeping inflation below an agreed benchmark and supporting growth. The same policy was undertaken by the ECB for the decade following its inception in 1998.

Nevertheless, the crisis has shown that interest rate expectations cannot be fully anchored by short-term policy rates, as many other factors both national and international play a role.

Moreover, for many years, the possibility that the main policy rate of central banks could ever reach a "lower bound" (close to zero) undermining the power of countercyclical monetary policy despite an undesirable low level of capacity utilisation and a low inflation or even a deflation was considered only "a theoretical curiosity" (Woodford, 2012).

The first central bank to face such a "theoretical curiosity" was the BOJ in the late 1990's when a reduction to zero of its main operating overnight target - the "call rate" - was not sufficient to halt deflation in Japan. Despite the poor outcome, only in July 2006, did the BOJ stop making commitments to a zero interest rate policy. Japan has continued suffering from low growth and inflation until April 2013, when the BOJ president Kuroda finally decided to introduce unconventional monetary policy measures. Kuroda has promised to double Japan's monetary base and the BOJ holdings of government bonds and to achieve a target of 2 % inflation by 2015.

In the wake of the global financial and banking crisis of 2008 and with a deteriorating economic situation, the FED (and later the BoE and the BoC), started to use unconventional monetary policies (Gertler and Karadi, 2010). The US monetary policy rates has been - like in Japan - close to the lower bound (the Federal funds target band was between zero and 25 basis points since December 2008) without being able to stimulate growth. Inflation was lower than desired (Woodford, 2012).

Facing a similar economic and financial situation, the ECB has been using also "non standard measures" since July 2010, even if it had still room to lower short-term interest rates.

There are two major differences between the "non standard" measures taken by the ECB and the "unconventional" measures of the FED, BoJ, BoE and BoC.

First, the ECB activated non-standard measures even though its main refinancing rate (MRO) had not yet reached its lower bound as was the case in the US and Japan. It did so mainly because the euro area financial market fragmented along national borders and, as a result, the monetary transmission mechanism stopped working in some euro area Member States.

Second, the money injected by ECB through non-standard policy measures and largely used to buy government debt in distressed euro area Member States was sterilised. This, again, is in contrast to the FED, the BoJ or the BoE that let their monetary base to increase (i.e. quantitative easing). Three main reasons explain the different ECB approach:

First, the structure of financial intermediation. In the euro area, about 70 % of financial intermediation (credit) is operated by banks and only 30 % by financial markets, while exactly the opposite happens in the US. In the UK there is a 50 % split between bank-based and market-based financial markets.

Second, the risk profile of the collateral. While the FED and the BoE used to purchase "riskless" government bonds issued by the corresponding treasury, the ECB has been buying

government bonds issued by 17 different euro area treasuries which were featuring very different credit-risks, according to market assessments.

Third, the role of monetary policy. The key mandate of ECB is to maintain price stability in the euro area as a whole. Therefore, ECB monetary policy can only deal with pan euro-area shocks, leaving to fiscal policy the task to counter idiosyncratic or asymmetric euro-area shocks. Unfortunately, the room for fiscal policy is currently very limited in the euro area and, as a result, ECB non-standard monetary policy has been instrumental to support individual Member States hit by asymmetric/national shocks. However, Cour-Thimann and Winkler (2013) show that the ECB has been more successful at repairing transmission mechanism of monetary policy rather than at delivering additional monetary stimulus.

1. ECB'S NON-STANDARD MEASURES

In May 2010, ECB President Trichet introduced, the Securities Market Programme (SMP). The aim of the programme was to buy government bonds of euro area Member States in the secondary market to address "severe tensions in some of the euro area bond markets" and by fully sterilising the bond purchase. The programme did not specify any "size" or "time" limit for the purchase.¹

These purchases were stopped in May 2011 and restarted later until the 6 of September 2012, when the new Outright Monetary Transactions (OMT) programme was announced.

At the end of 2012, the outstanding amount of SMP holdings at the ECB was EUR 208 billion at book value. The SMP Programme has been less effective than expected because of the dominant market perception that the ECB had taken the decision reluctantly.

In December 2011 and in February 2012, President Draghi introduced two LTROs (three-year Long-Term Refinancing Operations) with the aim to alleviate credit market tensions (on long-term interest rates) in distressed euro area Member States following the break-up of the monetary transmission mechanism. That is, reductions of policy rates were not adequately transmitted along the yield curve in several distressed economies of the euro area.

According to the Bank Lending Survey (BLS), ECB non-standard monetary policy measures have had a positive impact as they have lifted the prospects for real GDP growth and loan provision for non-financial corporations (see also Darracq-Paris and De Santis, 2013). Nevertheless, commercial banks from distressed Member States stopped using the interbank market for funding, given that they could obtain cheap financing directly from the ECB.

In September 2012, President Draghi introduced the OMT Programme, designed to replace SMP and to address its deficiencies. So far, the OMT has been much more effective than the SMP is stabilising yields, most likely because the terms of its announcement were "unlimited bond purchases": who wants to bet against an unlimited firewall? The OMT is not "targeted to overall monetary conditions" but only to "disruptions in certain markets" subjected to "malfunction" or to "irrationality" by investors, which could "hamper" the monetary policy transmission and can only be activated under "strict conditionality" (i.e. an ESM programme).

Lately, in July 4 2013, ECB President Draghi introduced for the first time in the ECB history the so-called "forward guidance" on interest rates by stating "Our monetary policy stance is geared towards maintaining... the key ECB interest rates to remain at present or lower levels for an extended period of time".² The reason for this new form of monetary policy measure is to anchor long-term interest rates, i.e. the key rates for spending and investment decisions, to short-term interest rates, "given the broad-based weaknesses in the real economy and subdued monetary dynamics" and in presence of contained inflation expectations in the mid-term.

¹ The SMP Programme was responsible for the resignation of Jürgen Stark, member of the ECB Executive Board, in September 2011.

² <http://www.ecb.europa.eu/press/pressconf/2013/html/is130704.en.html>.

2. TWO TYPES OF NON-STANDARD OR UNCONVENTIONAL MONETARY POLICIES

Two different types of non standard or unconventional policy measures have been activated by major central banks, including the ECB. The first is "purchasing financial assets in the markets". The second is making a "commitment" to keep interest rates very low for a prolonged period of time or until a precise economic target is finally met (The Economist, 2013)

The first non-standard policy measure is used when the central bank aims to reduce the "present cost of borrowing". It buys medium- and long-term financial assets in the market (mainly government bonds, but also corporate debt and household mortgages) to lower present and medium and long-term rates in order to reduce the present borrowing costs across the economy.

The second non-standard policy measure is used when the central bank aims to reduce the interest rates that people expect to pay and receive in the future, that is the "present and future cost of borrowing". Forward guidance is basically a commitment to keep short-term interest rates low "until a certain economic target selected by the central banks is achieved" or "during an extended period of time".

In the FED case (resp the BoE), "forward guidance" translates into a commitment to keep short-term interest rates low until the level of US unemployment does not fall below 6.5 % (resp. 7 % in the UK).

In the ECB case, there is not an explicit economic target, such as a level of growth or of unemployment, but only the condition that "the economy would need to improve better than in our base scenario". In order to achieve this less concrete goal the ECB is committed to keep its Main Refinancing Rate (MRO) at a low level for an extended period of time. The ECB was well known for observing a strict policy of no commitment. It used this new "system of communication" for the first time since its creation.

The first central bank to use "forward guidance" was the Bank of New Zealand in 1997. The FED observed two periods of "implicit" forward guidance in 2003 and 2005 (Kool and Thornton, 2012). A similar policy was adopted by the Bank of Norway in 2005, the Bank of Sweden in 2007 and more recently - under Governor Mark Carney - the Bank of Canada and the Bank of England.

3. SOME DRAWBACKS OF NON-STANDARD OR UNCONVENTIONAL POLICIES

Both non standard and unconventional measures have their own drawbacks.

In the case of “purchasing medium and long-term financial assets in the market”, the main drawback is that even if it market rates and “national” investors tend to be affected, “foreign” investor’s asset allocation decisions may also react, thereby reducing the effectiveness of central bank's policy.

According to The Economist (2013) a combined USD 9.7 trillion assets have been purchased so far in the crisis by the FED, ECB, BoJ, BoC and BoE and are now central bank's balance-sheets. But foreign investors hold USD 5.6 trillion assets from these countries. China and Japan own more than the FED. In the case of the BoE USD 1.4 trillion are owned by foreigners. The FED bought assets worth USD 2.8 trillion in the five years after 2008 and foreign investors bought another USD 2.3 trillion helping the FED decision to lower rates. But, in 2013, by contrast, foreign investors sold USD 45 billion of US Treasuries leading to an increase in those interest rates that the FED wanted to reduce.

In the case of “forward guidance”, the drawback is that investors and markets, both national and foreign, may ask for stronger commitments over time to test the time-consistency of central bank policy.

As Finn Kydland and Edward Prescott (1977) have shown in thier famous paper, the “time inconsistency” problem arises when a committment cannot be maintained. In the case of a central bank, future commitments lack credibility if people think that the central will “backtrack” later in its promises. For instance, it cannot be credible a commitment to hold interest rates low for a prolonged period of time if, in its announcement, it is also added that, “if circumstances change, we will raise rates”: A committment must be time-consistent to be operational (The Economist, 2013).

As a clear evidence of these drawbacks, interest rates in the US and the UK are rising today, despite FED and BoE commitments. Investors are asking for stronger commitments than those made by the FED and the BoE. By contrast, an example of “strong commitment” with, so far, highly efficient results has been President Draghi’s famous sentence, in July 2012, that he would do “whatever it takes” to save the euro.

The present “forward guidance” policy by the ECB does not seem to be as as strong as in July 2012, when expectations in the financial markets of a “Euro break up” were very high. It also appears to be less strong than that of FED or the BoE as it lacks of a clear macroeconomic target (e.g. the level of unemployment).

Nevertheless, during his introductory statement to the press conference and in the Q&A President Draghi gave more hints to the markets and emphasised ECB's committment by stating that: “our monetary policy will be accommodative for as long as necessary”; “the Governing Council has reached a unanimous decision on the forward guidance”; “an extended period of time it is not only twelve months”. He also said that “50 basis points is not the lower bound” for the policy rate and “a cut in ECB key rates includes also the deposit facility” and “does not exclude a negative deposit rate” and “credit flows continue to be weaker and weaker”.

A member of the ECB Executive Board, Peter Praet (2013) has recently recognised that the formulation “for an extended period of time” marks a change in the ECB communication strategy on monetary policy and must be interpreted as a form of “forward guidance”. He also stated that “the way in which central banks communicate decisions is perhaps as important as the decision itself”.

According to Praet, forward guidance, by keeping the short-term rate at the present level for an extended period of time, exerts a downward pressure on long-term interest rates and engineers an easing on credit conditions, "even though the level of the short-term interest rate remains constant". Praet claimed that the ECB "forward guidance" includes an "easing bias", conveying the notion that "we have not reached the lower bound" on our key interest rates and "we have not run out of ammunition".

Another ECB Executive Board member, Benoit Coeuré (2013) has mentioned three principles which guide ECB non-standard policy measures:

The first principle is that any provision of excess liquidity should be specifically targeted towards the market which is most impaired by market constraints making sure that the provision of liquidity produces the most beneficial effect per unit of intervention.

The second principle is based on the observation that financial market fragmentation tends to lead to "an unwarranted risk premia and create a self-fulfilling process that can be devastating". Therefore, non standard measures have incorporated an element of "insurance against those risks": such as the extension of their maturity up to 3 years, in the case of the LTROs, or the coverage of "tail risks" due to expected currency denomination, in the case of the OMT.

The third principle is a direct consequence of the second, given that it is well known that any "provision of insurance against adverse scenarios can generate perverse incentives"; the ECB has chosen to offer "partial insurance" as a guiding principle to mitigate "moral hazard" concerns. The conditionality imposed to the OMT Programme is a clear example of the application of this principle.

The IMF (2013) believes that unconventional monetary policies are warranted when economic conditions do not improve or even worsen. Yet, their growing scale raises risks that need to be mitigated with macroprudential policies. If monetary policy is called to do too much and the breathing space it offers is not used to engage in needed fiscal, structural and financial sector reforms then it is not the solution.

These reforms are essential to ensure macroeconomic stability, entrenching the recovery, and eventually allowing for the unwinding of unconventional monetary policies. Therefore, structural reforms need to be part of the conditionality for the use of non standard monetary policies.

Jordi Galí (2013) shows that in the case of rational asset bubbles, a "leaning against the wind" interest rate policy may raise its volatility. The optimal monetary policy must strike a balance between stabilisation of current aggregate demand, which calls for a positive interest rate response to the bubble, and stabilisation of the bubble itself and hence of future aggregate demand, which would warrant a negative interest rate response to the bubble. If the average size of the bubble is sufficiently large the latter motive will be dominant, making it optimal for the central bank to lower interest rates in the face of a growing bubble.

Giannone, Lenza, Pill and Reichling (2011), show how the Eurosystem has been able to avoid a calamity similar to the Great Depression, through adequate non-standard monetary policies.

4. ASSESING THE EFFECTIVENESS OF THE ECB NON-STANDARD POLICIES

The main issue that the ECB is facing regarding these non-standard policies is that the euro area is not (yet) a single federation or confederation of countries with a centralised fiscal policy as it is the case of the other countries that have applied similar policies (the US, Japan, the UK and Canada).

The euro area is only a single market and a monetary union of 17 Member States, each with its own government and its own treasury. Investors have also realised (at least since 2010) that the euro area not yet a Banking Union and that monetary policy cannot easily deal with country-specific asymmetric shocks forever.

Therefore, the ECB is currently doing a huge effort within its own narrow mandate along three key dimensions: trying to avoid a deadly break-up of the euro area; adapting and targeting the single monetary policy to address problems in individual Member States, an extremely complex task; ensuring effectiveness of monetary policy with policy rates close to the lower bound. These drawbacks notwithstanding, the ECB is learning fast and non-standard measures are helping to improve the effectiveness of monetary policy across the euro area. The ECB intervention has been instrumental to save the euro and the monetary union.

The ECB faces the additional difficulty that its policy decisions are often criticised or even challenged by some euro area central banks, by politicians and, sometimes, even by national constitutional courts. These are not the best ways to address a fully independent euro area central bank.

As a way of avoiding this kind of critiques, the ECB should publish the minutes of Governing Council decisions or discussions as the FED and the BoE do. The issue here is that both the FED and the BoE have a smaller group of members who propose the monetary stance: the Federal Open market Committee (FOMC) and the Monetary Policy Committee (MPC). Their task is to target inflation, growth and unemployment. The ECB does not have a formal or official similar body, neither a dual or triple mandate.

Many of the critiques to the ECB monetary policy and to its non-standard policies are therefore mostly unwarranted.

The lack of a true dual mandate for the ECB makes any "commitments" in "targeting real economic magnitudes" very difficult.

The recent Geneva Conference on the World Economy has dealt with the issue of "Exit strategies by central banks". There has been a widespread agreement on three key issues (Charles Wyplosz, 2013): a) Financial stability is now recognised as an implicit responsibility of central banks; b) Purchases of long-term assets by central banks should not be abandoned; c) Central banks are now involved in macro-prudential financial supervision, which is not separate from micro-prudential supervision. Carpenter, Demiralp and Eisenschmidt (2013) have estimated the effects of the ECB's non-standard measures on the euro area bank funding markets under stress. They found that these measures have reduced bank funding volatility, increase loan supply and sustain economic activity.

In sum, the ECB is very independent but its hands are, somehow, handcuffed by its narrow mandate. This is why there are no unintended consequences following any of its non-standard monetary policies. In sum, let us the ECB do its job as better as it can, within its narrow mandate, and only then, criticise it if it was not able to achieve the expected results.

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DIRECTORATE GENERAL FOR INTERNAL POLICIES
POLICY DEPARTMENT A: ECONOMIC AND SCIENTIFIC POLICY

Non-Standard Monetary Policy Measures – Magic Wand or Tiger by the Tail?

Ansgar BELKE

NOTE

Abstract

This Briefing paper briefly assesses the effectiveness of different non-standard monetary policy tools in the euro area. Its main focus is on the Outright Monetary Transactions (OMT) Programme, which has been praised as a “magic wand” by some. The paper discusses possible unintended consequences of these non-standard monetary policy measures in the current context of weak economic activity and subdued growth going forward. It looks at specific risks for price stability and asset price developments. It deals with the question of whether US-style quantitative easing (QE) may serve as a blueprint for the ECB. It argues that the Fed may have got a “tiger by the tail”, i.e. the US-style quantitative easing may led US central bank to accept either a recession or inflation. The paper also investigates whether the OMT programme imposes costs onto the EU taxpayer. It does so by looking at the legal background of the OMT programme and at the specific creditor status of the ECB under different assistance programmes. Finally, the paper outlines some policy implications stemming from euro-area cross-country differences in money and credit growth. It also makes an assessment of the tools available to ECB to stimulate the economy, for example, by investigating how the effectiveness of the ECB’s policies can be improved through enhanced transparency and the new course of “forward guidance”.

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EXECUTIVE SUMMARY

In times of extraordinary financial market tensions, the monetary transmission mechanism may well be hampered due to dysfunctional financial markets. Chiefly for this reason, the ECB has resorted to non-standard, unconventional measures to ensure the transmission of monetary policy impulses to the economy.

Analysts are split about the success of these measures. Some argue that ECB commitment to resort to non-standard monetary policy tools have been instrumental to calm down markets, to reduce stress in bank funding, to improve bank lending, and, overall, to take away fears of a collapse of the Euro. Others voice criticism, in particular as regards the Outright Monetary Transactions (OMT) Programme, e.g. that it delays fiscal discipline, blurs the distinction between monetary and fiscal policy, lessens pressure on painful structural reforms and/or creates inflation or, possibly, another asset bubble.

In Section 2, we briefly assess the current macroeconomic background and discuss the effectiveness of the different non-standard monetary policy tools in the euro area. The main focus is on the OMT Programme which is praised by some as a "magic wand". Certainly, interest risk premia have declined since OMT announcement and tensions in the real economy appear to have gone down as well. On the other hand, fragmentation as measured by the spreads on short-term loans to firms has not diminished significantly compared to a year ago, except for a few credit segments. At the same time, the recent slow contraction of Target II imbalances may reflect not only greater trust in the periphery of the European Monetary Union (EMU) but, also, shrinking trust in core EMU countries.

Section 3 discloses possible unintended consequences of these measures in the current context of weak economic activity and subdued growth going forward. To this purpose, it investigates specific risks for price stability and asset price developments.

In particular, Section 3.1 deals with the question of whether quantitative easing in the US-style may serve as a blueprint for the ECB and argues that the Fed may have got a "tiger by the tail" (Hayek, 2009), i.e. the bank may be forced to accept either a recession or higher inflation.

By taking into account the legal background of the OMT programme and the specific creditor status of the ECB under different programmes, we assess in Section 3.2 whether the OMT programme is really costless to the tax payer. Barring an adverse scenario whereby very large negative shocks impede peripheral countries to access capital markets, the "announcement effect" of OMT activation can be described as an "unlimited" firewall. It is true that OMT strict conditionality could be tested by markets, but the ECB stressed that it will make "whatever it takes" to defend the euro and the assets on its balance sheet

Section 3.3 discusses policy implications stemming from differences in money and credit growth in different individual countries of the euro area. The ECB can and should respond with its single monetary policy only to euro area wide risks, leaving to national macroprudential instruments the task of dealing with idiosyncratic risks.

Section 4 assesses what other tools or instruments the ECB could use in order to stimulate the economy in the euro area. It does so by discussing how the effectiveness of the ECB's policies can be improved through more transparency and "forward guidance". We interpret "forward guidance" as a policy rule for the path of ECB interest rates in the future, i.e. a tool to stabilise expectations of market participants in times of higher uncertainty. Hence, "forward guidance" is an indirect instrument to loosen credit conditions and thus stimulate credit supply and economic growth, similar to interest rate cuts.

As the ECB "forward guidance" policy is not anchored to a macroeconomic target (e.g., in contrast to the US Fed), transparency of the tool becomes a key aspect of its effectiveness. The paper therefore briefly considers issues such as (a) the scope of publishing minutes of ECB Council meetings, (b) areas where ECB transparency could be enhanced, (c) the accountability of monetary policy, (d) additional transparency and accountability of the ECB in its role banking supervision, (e) general limits to transparency and communication of central banks.

One recommendation made in the paper is the return to an *intermediate target* such as the growth rate of the monetary base or of credit as a *strict rule* to foster transparency.

INTRODUCTION

In times of extraordinary financial market tensions, the monetary transmission mechanism may well be hampered due to dysfunctional financial markets. Exactly for this reason, the ECB has resorted to non-standard, unconventional measures (ECB 2013) to ensure the transmission of monetary policy impulses to the economy.

These unconventional tools comprised liquidity support to commercial banks at favorable rates such as the Long-Term Refinancing Operation (LTRO) programme. Until early 2008, the longest LTRO maturity was three months. The ECB has successively introduced six-month, 12-month and 36-month terms for LTRO finance.

The Eurosystem can also conduct interventions in the euro area's public and private debt securities markets by purchasing certain assets outright, instead of merely accepting them as collateral. On 2 August 2012, the Governing Council of the European Central Bank (ECB) announced that it would undertake outright transactions in secondary, sovereign bond markets, aimed *"at safeguarding an appropriate monetary policy transmission and the singleness of the monetary policy."* On 6 September 2012 the ECB published the technical features of the Outright Monetary Transactions (OMTs) programme.¹

Analysts are split over the success of these measures. Some argue that ECB commitment to resort to non-standard monetary policy tools have been instrumental to calm down markets, to reduce stress in bank funding, to improve bank lending, and, overall, to take away fears of a collapse of the Euro. Others have voiced some criticism, in particular as regards the OMT, e.g. that it would delay fiscal discipline, blur the distinction between monetary and fiscal policies, lessen pressure on painful structural reforms and/or create inflation or another asset bubble.

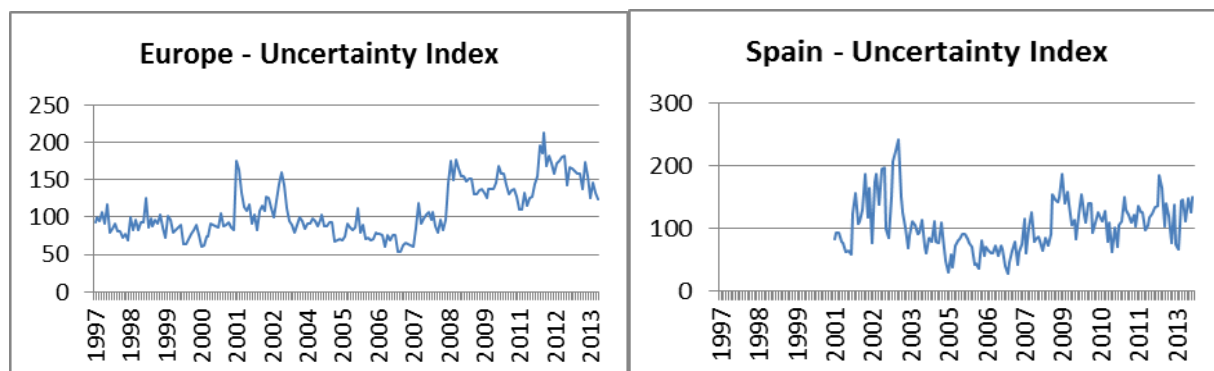
The remainder of the Briefing paper is organised as follows. In Section 2, we briefly assess the current macroeconomic background and summarise evidence on the effectiveness of the different non-standard monetary policy tools in the euro area. Section 3, the first main part of the paper, discloses further possible unintended consequences of these measures in the current context of weak economic activity and subdued growth going forward. To this purpose, we investigate specific risks for price stability and asset price developments. In particular, Section 3.1 deals with the question of whether quantitative easing in the US-style may serve as a blueprint for the ECB. Section 3.2 looks at the legal background of the OMT programme, at the specific creditor status of the ECB under different programmes and makes an assessment of the OMT programme in terms of taxpayer costs. We conclude this part with some policy implications stemming from differences in money and credit growth in different individual countries of the euro area (Section 3.3). The second main part of the Briefing paper, Section 4, assesses what other tools/instruments the ECB could use in order to stimulate the economy in the euro area. It does so by investigating how the effectiveness of the ECB's policies can be improved through increased transparency and "forward guidance". Section 5 concludes.

¹ See: http://www.ecb.int/press/pr/date/2012/html/pr120906_1.en.html and <http://www.ecb.int/press/pressconf/2013/html/is130704.en.html>.

1. MACROECONOMIC BACKGROUND: WHAT HAS BEEN ACHIEVED?

This section briefly assesses the effectiveness of the different non-standard monetary policy tools in the euro area and in different Member States. Following Mario Draghi's declaration on July 26th 2012 "We will do everything to preserve the Euro, and believe me, it will be enough", economic uncertainty - as measured by the Economic Policy Uncertainty Index² (Figure 1) - has declined for the EU as a whole but not for a distressed country like Spain.

Figure 1: Economic Policy Uncertainty Index



Source: PolicyUncertainty.com. Monthly data based on Consensus forecasts. "Europe" = France, Germany, Italy, Spain and UK.

A similar pattern for a single composite financial stress indicator of uncertainty has recently detected by Islami and Kurz-Kim (2013).

At the same time, fragmentation as measured by the spreads on short-term loans to firms has not diminished significantly compared to a year ago, except for a few credit segments. Similarly, the recent slow reduction of the Target II imbalances by about EUR 300 bn since summer 2012 does not reflect only positive developments (Commerzbank, 2013). For instance, the dynamics of the decrease has slowed down and the adjustment has taken place more than proportionally in surplus countries (e.g. the Netherlands and Finland) compared to deficit countries. Hence, the recent Target II-dynamics cannot solely be interpreted as the expression of increasing trust in the peripheral EMU countries but, also of shrinking trust in core countries.

It has proven to be very difficult to assess potential *long-run* negative effects of OMT using *short-run* empirical evidence (Belke, 2012). For this reason, this Briefing paper does not look for econometric evidence of positive or negative effects of ECB's OMT announcements.³ Instead, an indirect approach is adopted, by focusing on further risks underlying unconventional monetary policies and on some limitations concerning the effectiveness of the OMT programme. The paper also investigates whether more transparency and "forward guidance" may help to stabilise expectations of market participants and to reduce macroeconomic volatility.

² PolicyUncertainty.com.

³ For a detailed survey on available empirical studies on the effectiveness of unconventional monetary policies of the Fed and the ECB see, for instance, ECB (2013).

2. NON-STANDARD MONETARY POLICY TOOLS - UNINTENDED CONSEQUENCES AND RISKS

In the following, we investigate possible unintended consequences of unconventional monetary policy measures in the current context of weak economic activity and subdued growth. We also aim to identify the kind of risks they entail for price stability and asset price developments.

2.1. Quantitative easing US-style: a blueprint for the ECB?

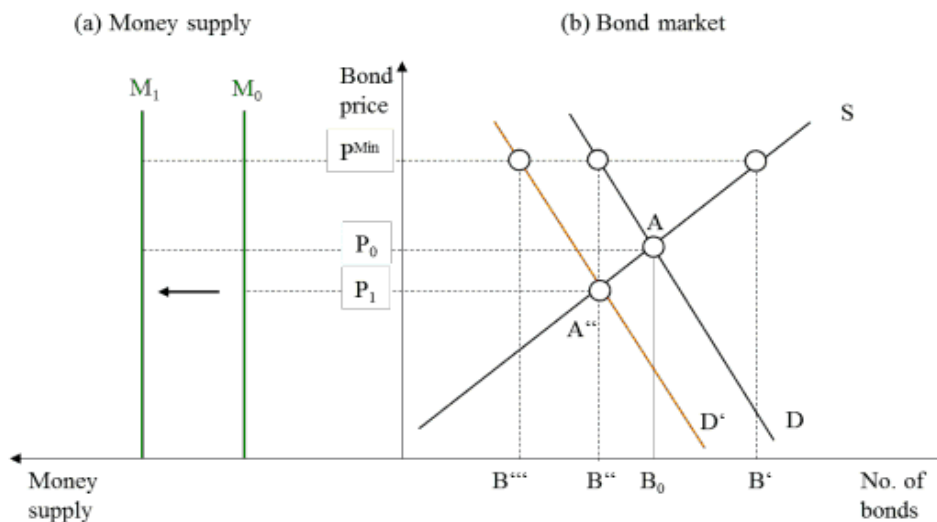
In the aftermath of Ben Bernanke’s press conference in June 2013 which laid out an exit strategy from QE, financial markets have become increasingly concerned that the US Fed might abandon its unconventional monetary policy. The Fed started to adopt QE in 2008 to counter the financial and economic crisis.

With QE the central bank buys (or sells) bonds in the market. If a central bank purchases a bond, the bank boosts bond demand and, as a consequence, the bond price rises above its “market” equilibrium price (and the interest rate declines below its “market” rate (Polleit, 2013)). The ensuing possibility of multiple equilibria will be discussed in Section 3.2.

Central bank bond purchases: a minimum price policy

To start with, it makes sense to interpret QE as a *minimum price policy* applied to bonds. Already the ECB bond purchases within the SMP framework have been interpreted as a minimum price policy (Belke, 2010)). This can be elucidated in Figure 2 which has been derived from the textbook by Belke and Polleit (2010). It is important to note that in the Keynesian liquidity theory, the supply of money always equals the demand for bonds and vice versa.

Figure 2: Policy of QE in the bond market – money market framework



Source: Belke and Polleit (2010), pp. 99f., and, derived from the former, Polleit (2013).

In Figure 2, the intersection between the supply of and demand for bonds represents the equilibrium price P_0 . If QE is in place, the central bank intends to push the bond price beyond the prevailing equilibrium bond price from P_0 to P_{MIN} . This in turn leads to an excess supply of bonds ($B' - B''$). In order to keep bond prices at P_{MIN} , however, the central bank is forced to buy the resulting excess supply of bonds, thereby expanding the money supply in

the economy through newly created base money. This corresponds to a shift of the money supply schedule from M_0 to M_1 . Money is created “out of thin air” (Belke and Polleit, 2010).

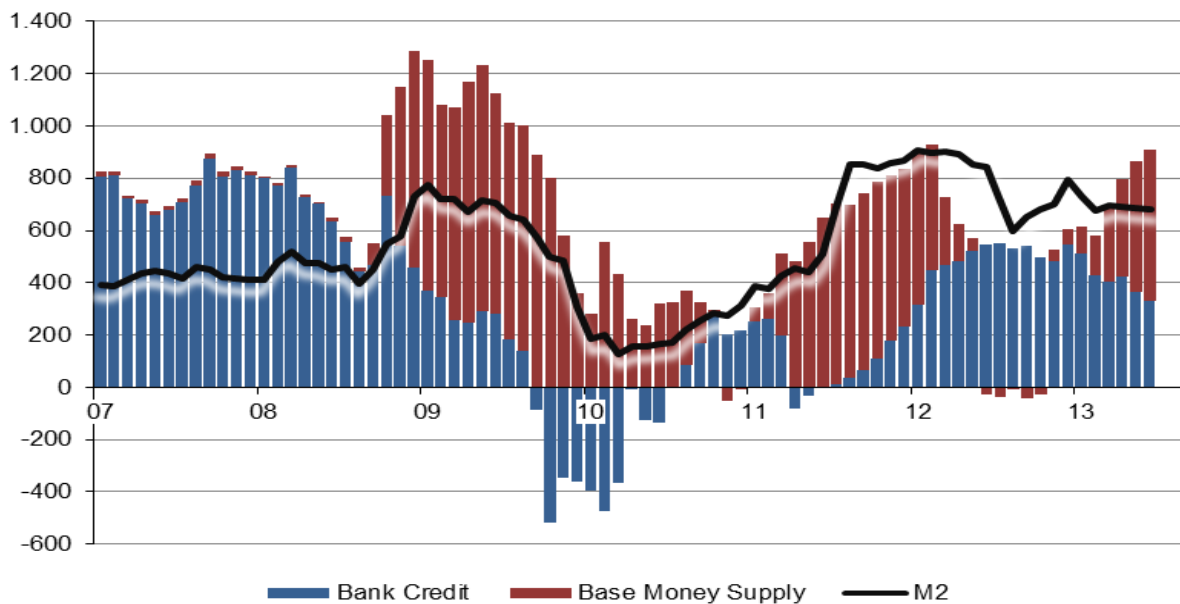
Historical experience has shown that at some point investors may become concerned about inflation following this monetary expansion. For instance, if they do not trust the central bank commitment of full sterilisation of the newly created money (Belke, 2010), they may decide to reduce their demand for bonds. The demand schedule moves from D to D' in Figure 2. Excess bond supply raises to $B' - B'''$, an amount which has to be purchased by the central bank to keep prices constant at P_{MIN} . This in turn will expand the quantity of money even further (Belke and Polleit, 2010).

Money supply expansion: bond purchases from banks versus non-banks

If a central bank buys bonds, it raises the supply of base money. However, in order to derive the effects of this operation on the broader money stock (M_1 or M_2 or M_3), one has to carefully *differentiate between the sellers of the bonds*, i.e. banks versus non-banks. As stated in Polleit (2013) “If the central bank purchases bonds held by *banks*, it increases banks’ excess reserves, while the commercial money stock, that is M_1 and M_2 , remains unaffected. M_1 and M_2 would be increased only if and when banks use their excess reserves for additional lending and/or asset purchases.

If the central bank purchases bonds held by *non-banks* (such as, for instance, insurance companies, pension funds and private savers), it increases the commercial money stock – M_1 and M_2 – directly: This is because the purchasing price will be credited to the seller’s checking account, which is included in M_1 and M_2 .”

To summarise, *the central bank is able to affect the outstanding stock of money directly only if it buys bonds held or newly issued by non-banks*. And this is what have been happening in the US since 2011 (Polleit, 2013). This was a reaction to the declining bank credit expansion since 2008, which even turned into negative in 2010. This curbed M_2 growth because a decline in bank credit diminishes deposit money (Figure 3). The policy of QE adopted by the Fed since late 2008 did not produce any headwind until 2011, when Ben Bernanke changed his course (Belke and Polleit, 2010).

Figure 3: US bank loans, money supply and M2*(Annual changes in USD bn)*

Source: Thomson Financial, Polleit (2013).

Looking at the deceleration of money creation through bank credit expansion since mid-2012, it is unlikely that the Fed will suspend its QE policy anytime soon as this would have a large adverse effect on investment, which has been boosted by a long-lasting regime of artificially lowered rates, and, therefore, growth. .

Any change in the FED policy will necessarily be short-run. Interest rates will thus be kept at the current artificially low levels, i.e. by some 2 ½ - 3 pps., according to Taylor reaction function.

Path-dependence and vicious circles

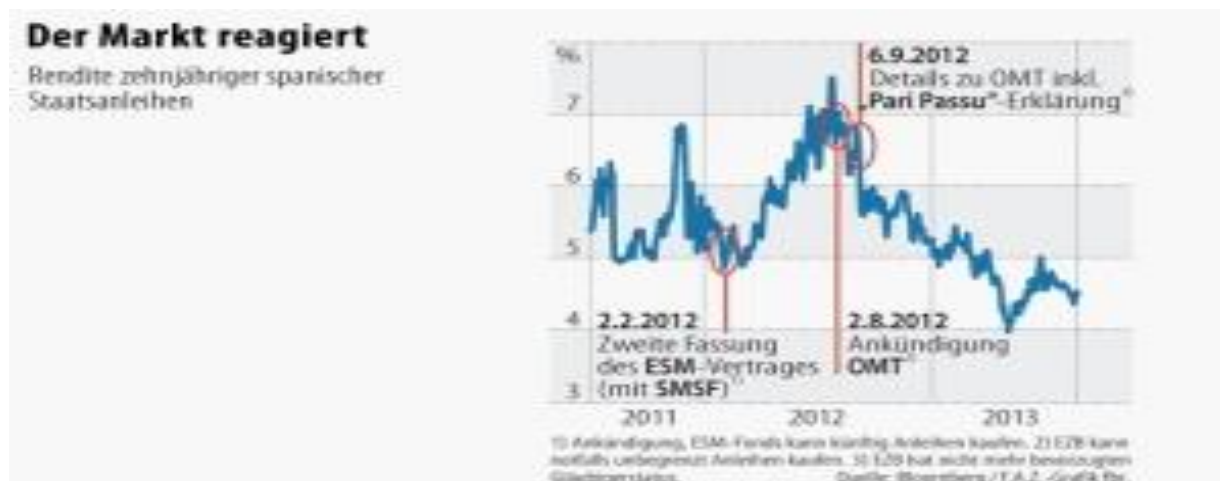
If the Fed artificially lowers interest rates to prevent a recession, investors may wish to fundamentally decrease their bond holdings – for instance, because they anticipate that the Fed cannot act against market forces without taking up additional inflation risks in the long run. This has the potential to trigger a vicious circle, beyond the path-dependence of sovereign bond purchases (Belke, 2010). The mechanics behind this vicious circle which may sow the seeds for a new crisis runs can be described as follows:

In order to avoid that the bond sell-off raises bond yields, the central bank must step in and buy the resulting excess supply of bonds through creating new money. This in turn may lead investors to sell the bonds off their balance sheets even further. At that point, the FED may get trapped, holding a “tiger by the tail” (Hayek (2009) and it will have to accept either a recession or inflation. As this is an unpleasant alternative for a central bank, the Fed could decide an early exit from QE. With respect to the possibility of higher inflation triggered by QE policy, we addressed two different sources of inflation earlier in this Section: additional bond purchases from non-banks and banks using their excess reserves for additional lending and/or asset purchases. The ECB should beware that combining US-style QE policy with forward guidance (i.e. keeping short-term interest rates low for an extended period of time) may engender ECP policy mandate of price stability.

2.2. Is the OMT programme really costless?

Commentators of the OMT Programme by the call the attention of the "announcement" effect of the programme, i.e. to the fact that the programme is delivering without the ECB haven spent one single euro so far. According to some economists (Fratzscher et al., 2013; Cœuré, 2013), OMTs is "one of the most skilful and successful monetary policy communications in decades". Darvas (2012) even called the OMT programme the "ECB's magic wand".

Figure 4: Does the market react to the announcement of the OMT Programme?



Source: Westermann (2013), FAZ.

Figure 4 shows the pattern of Spanish sovereign bond yields between 2011 and 2013.⁴ Spain is already a programme country and one of the first countries where OMT could be activated according to Westermann (2013).⁵ He also points out that while bond yields for Spanish bonds have increased after the announcement of the ESM programme, they fell after announcement of the OMT. Importantly, the ECB enjoys a preferred creditor status within the ESM while it is considered a creditor "pari passu" in the context of its OMT (Sinn, 2013).

Whenever the ECB enjoys a preferred credit status (e.g. less risks of cuts on his collateral), its involvement goes along with higher risks of haircuts for private investors (Belke, 2011).

As from September 6, 2012, the Eurosystem is subject to the same treatment as private or other creditors (i.e. a "pari passu" arrangement) as regards bonds issued by euro area Member States and purchased by the Eurosystem through the OMT programme (Belke, 2012). Westermann (2013) claims that the effectiveness of OMT "announcement" is largely related to the preferred creditor status of the ECB.

This conclusion is supported by recent empirical evidence on recent rescue packages. Data show that interest rates on sovereign bonds have to a large extent been driven by the creditor status of the rescuing institution involved (Westermann and Steinkamp, 2012). Indeed, subordinated creditors demand higher interest rates in order to be compensated for the risk of higher haircuts in case of a country's insolvency (Belke, 2012).

It is therefore non correct to claim that the OMT programme is costless for the taxpayer as market participants do look at the credit status of the institutions involved and "insure" themselves against potential risks of capital losses.

⁴ In Section 2, we disclosed that the Policy Uncertainty Index has declined for Spain in the recent months.

⁵ See also Belke (2012) for this specific country choice, but based on a different argument.

The larger is the firepower of the rescue fund, the lower is the bonds' yield in distressed countries and the lower is their probability of default. This argument, however, neglects the role of the political cycle: as exemplified by Gros (2012a), for instance, by election dates may affect the default probability of a country. In other words, there might be different (equilibrium) interest rate compatible with ECB intervention (Gros, 2012a).

Westermann (2013) comes up with yet another caveat. Should financial markets correctly assess the ability of a distress country to pay back its debt, the *yield compression* observed since the OMT announcement and the abandonment of the ECB's preferred creditor status are not a *free lunch*; they clearly come at a *cost for the taxpayer*. As with any other insurance benefit, where the damage has not yet materialised, the insurance supplier owns an implicit liability and it cannot be excluded that these liabilities will be realised at some point in the future.

But Westermann (2013) does not take into account an important differentiation between SMSF and OMT programmes, i.e. OMTs are feasible only if the relevant countries have not lost market access.⁶ A necessary conditions for OMT eligibility thus are both an EFSF/ESM programme *and* steady bond issuances. Looking at the euro area countries under financial stress, the first condition is exclude both Italy and Spain. For, Italy is not a programme country, so far. and the programme for Spain only relates to the financial sector. The bond market criterion excludes both Greece and Portugal.

To conclude, the negative trend in euro area sovereign bond yields observed in the recent past cannot be traced back to the OMT announcement simply because government bonds in of the vast majority of the distressed countries were simply not eligible for OMTs.

On the other hand, the above considerations imply that the probability of losses from OMT bond purchases is reduced by (a) the incentive provided by the programme to enact structural reforms; (b) access to capital markets. The latter condition is key for the ECB involvement as the EU Treaty prohibits the monetary financing of public debt (Cœuré, 2013).

Not many EA Member States fulfil both (a) *and* (b), for, if a country relies on ESM loans, it generally does not enjoy access to capital markets, unless it is about a precautionary programme (Belke, 2012).

But OMT may still have had an impact on sovereign bond yields, since it has eliminated tail risks. Most investors in sovereign bonds are less worried about whether economic growth in the next one or two years will be positive or negative and whether the government budget will be consolidated within three or four years. What is very important for them is that extreme negative events are excluded. According to market participants, the OMT announcement with the ECB willingness to buy any amount of government bonds has significantly lowered the possibility of such extreme negative events. This could not be attained by an ESM programme alone, as explained above.

At the same time, one should not exclude errors by market participants. Since OMT eligibility can only prevail if the countries enjoy market access, OMT can also not be an insurance against extreme negative events. If a country is eligible for OMT and is hit by a significant negative shock which causes the loss of capital market access, OMT could be terminated immediately.

Except in a scenario of significant negative shocks which causes the loss of capital market access of peripheral countries, the ECB is able of enacting support to periphery bond yields through the announcement of OMTs. A weak point of the OMT is that, in history,

⁶ See http://www.ecb.europa.eu/press/pr/date/2012/html/pr120906_1.en.html.

announcements of expansionary monetary policies have never been effective incentives to push through structural reforms (Belke, 2002).⁷

2.3. Differences in money and credit growth: Euro Area versus individual Member States

In spite of the unconventional monetary policy put in place, money and credit growth in the euro area are weak and lending volumes to the domestic private sector are decreasing. However, the *national dynamics* behind the aggregate figures *differ significantly*: a sustained decline in loans to the private sector masks weak lending activity in the peripheral euro area economies and portfolio shifts in favour of the core countries (e.g. such as Germany). A monetary analysis of the euro area has to take into account these heterogeneous developments and a solid assessment of the risks and side effects of the ECB's unconventional monetary policy thus must go beyond an analysis of aggregate developments in the euro area (Deutsche Bundesbank, 2013).

As regards the peripheral countries, the decline in lending is due to both cyclical developments and in some of them to the indispensable correction of past credit overhangs. Risks stemming from negative feedback loops among credit supply and real economic developments cannot be excluded (Deutsche Bundesbank, 2013).

The ECB can respond with its single monetary policy to idiosyncratic member country risks only if they affect the entire currency area. Otherwise, steps have to be envisaged in policy areas outside *ECB's responsibility*. For instance, *macroprudential instruments at the national level* should come into play, if there are indications of asset price inflation appeared in core EMU Member States. It is quite clear that the vulnerability of the peripheral countries' banking systems to further negative shocks represents the main risk to the downside for them and for the euro area as a whole. It is imperative to reduce this vulnerability.

⁷ On the contrary, it cannot be excluded that even a small *hint about retiring the programme* may send bond yields immediately to a higher level and fortunately add pressure for reform. A closer investigation of the euro area's history of rescue packages and their enforcement easily discloses several pertinent episodes supporting this view.

3. TRANSPARENCY AND FORWARD GUIDANCE - TOOLS TO STIMULATE THE ECONOMY IN THE EURO AREA?

In the following, we assess what other tools/instruments the ECB could use in order to stimulate the economy in the euro area. We do so by delivering details on whether the effectiveness of the ECB's policies can be improved through more transparency and "forward guidance".

3.1. Minutes of Council meetings and publication by name

Two months ago, ECB President Mario Draghi has urged the ECB to publish the minutes of ECB Governing Council meetings: Is this really a good idea?

The debate about a more transparent ECB has been revived by a significant change of its tasks during the crisis. With its SMP and its OMT the ECB has taken up quasi-fiscal tasks. Like finance ministers, it should be thus made accountable to parliaments. This appears to be legitimate as monetary policy has de facto been re-nationalised during the crisis: For instance, through a resuscitation of national banking systems by the emergency liquidity assistance (ELA, see, for instance, Joerg Kramer in *Handelsblatt*, 2013, and Gros, 2012).

By publishing Governing Council meeting minutes, as both the Fed and the BOE already do, the ECB may improve the transparency and efficiency of its policies significantly. This would support its stability-oriented policy at least on two grounds: first, the publication of minutes could provide a disciplinary incentive to improve on the quality of internal discussions between Governing Council members and counteracts any effort of Council members to deviate from a euro-wide oriented monetary policy; second, , the publication of the minutes may contribute to improve the balance of powers among ECB Board members and the governors of national central banks (Belke et al., 2005).

The foreseeable extension of the Governing Council due to the "enlargement" of the euro area and the reform of the Council's voting modalities enhance the rationale for the publication of the minutes. Further euro area enlargement will increase the number of members which in turn will make debates inside the ECB Governing Council more lively.. Moreover, after the euro area will have welcomed its 19th member, a complex reform of the voting modalities will take place (Belke and von Schnurbein, 2012).

Certainly, ECB Governing Council meeting minutes shall not necessarily attribute names to individual statement made in Council meetings; their main purpose is to explain the ECB Governing Council's thinking, debate and decision to the outside world.

The reason is that the ECB Governing Council Members, i.e. the governors of the national central banks could be put under pressure by their governments to vote in the interest of their home countries. The independence of the ECB Governing Council Members would be jeopardised, not to mention the difficulties stemming from the different dynamics in money and credit growth across euro area countries (Section 3.3). In addition, the more explicit the minutes are, the more it has to be feared that controversial topics will be discussed by excluding the general public (FAZ, 2013a).

3.2. ECB: lack of transparency?

Is the ECB plagued by a transparency bias, as claimed by some observers? Can we think of other means of enhancing transparency beyond publication of minutes and to explain ECB policies better?

Politically independent central banks tend to communicate clearly to market participants the monetary policy adopted. Transparency is a decisive instrument to align monetary policy with people's (stable) preferences (Belke et al., 2005).

The ECB ranks high as regards transparency (Dincer and Eichengreen, 2007). But this transparency weakened significantly in the course the crisis and the adoption of non-standard monetary policies. With the Securities Market Programme (SMP), the ECB merely published the weekly total amount of bonds purchased without informing about the country-specific structure, the maturities of the bonds, the criteria and/or the extent of future purchases (for details see Belke, 2012). This clear lack of transparency is striking, especially in comparison to the huge degree of transparency of the Fed and the BoE in the course of their quantitative easing (QE) programmes. Both central banks disclosed detailed information in order to be accountable to their taxpayers (Gros, 2012, p. 12).

In the public, the ECB frequently justified its "secrecy" with its necessity for the functioning of the sovereign bond purchase programmes. If there would not have been secrecy, the programme would have lost its efficiency. Complete transparency could have brought opposition to the programme by in the Northern euro area Member States, endangering financial stability in the euro area as a whole. But this argument appears to be weak: traders could easily identify the bonds purchased by the ECB (for details see Belke, 2012, Gros, 2012, p. 12).

Another, more pertinent reason, was clashes within the Governing Council on the issue of the ECB's government bond purchases. In case of the SMP they turned out to be even more significant than with respect to the OMTs against which according to Mario Draghi himself only the President of the Bundesbank opposed.

The same caveats can be raised with respect to the ECB's lack of transparency about its Long-Term Refinancing Operations (LTROs). Remember that the bond spreads suddenly fell with the LTRO implementation. This raised the suspicion that the additional liquidity was partly used for bond owned by French commercial banks (the so-called „Sarko trade“).

The issue of transparency of the ECB must be addressed because the ECB is an institution accountable to the European Parliament (Belke, 2012). More transparency of the ECB could really help in avoiding confusion about and negative side effects of its unconventional monetary policies.

Could transparency be enhanced by a return strict rules for *intermediate monetary targets*, such as the growth rate of the monetary base? Before the crisis, the ECB was indeed successful to create a framework which allowed market participants to estimate the ECB's reaction function in real time rather precisely. Essential ingredients for this success story was the two-pillar strategy combined with an adequate definition of price stability and a consistent communication (Belke et al., 2005, Issing in FAZ, 2006).

3.3. Forward guidance

"Forward guidance" is defined by the ECB as a commitment to "to keep short-term interest rates - not only the policy rate - low for an extended period of time".

Interpreted in terms of a Taylor's rule, forward guidance does not describe anything else than a policy rule for its future interest rate path. This seems overall adequate, because

in times of higher uncertainty, transparency and clarity help to give orientation and to stabilise expectations of market participants. Hence, "forward guidance" is an indirect instrument to loosen credit conditions and thus stimulate credit supply and economic growth without conducting any further interest rate cut (Bundesbank, 2013a).

"Forward guidance" as implemented by the FED is different: according to Woodford (2008), it is a commitment to anchor current and future short-term interest rates (hence long-term interest rates) to the achievement of a macroeconomic target (more specifically, an unemployment rate below 6.5 %).

Fed-style forward guidance "tends to create incentives for risk-taking". Excess monetary liquidity may spillover to other economies and cause stability risks there (Landau, 2013, p. 9). As the strong increase in world's stock markets after Ben Bernanke's now-famous statements in June 2013 has clearly shown, the Fed managed to calm down bond markets at the price of higher volatility. This clearly reminds us of the "liquidity spirals" of monetary financing described in the model developed by Brunnermeier and Pedersen (2009).

As for the ECB the central bank risks to breed even more pessimism in the markets. By indicating the need to curb official rates also for the next years, it could convey the impression that the bank anticipates a crisis enduring for several years and has surrendered over its key instruments of countercyclical policy. But if markets become more pessimistic, consumers' and investors' expenditures decline (Bullard, 2013).

Hence, ECB President M. Draghi is right *by not linking the ECB monetary policy to a specific macroeconomic target*. But he may now run the risk that the public perceives "forward guidance" just as a popular fashion in central bankers' circles and a compromise between doves and hawks within the ECB Governing Council.

3.4. How accountable can and must monetary policy be?

The more predictably monetary policy is the better market participants are able to align their decisions with those of the central bank. The economy is subject to less frictions and volatility since actors are better able to forecast the future time path of monetary policy and related variables. This view that more transparency reduces market volatility is clearly corroborated by the vast majority of empirical studies (Kool and Thornton, 2012, Middeldorp, 2011).

However, under imperfect information, improved enhanced transparency may not necessarily lead to an improvement of total welfare in an economy. From this point of view, there may be an optimum degree of "secrecy" and larger than zero (Kool and Thornton, 2012, Middeldorp, 2011).

3.5. The ECB and banking surveillance in the Euro Area: transparency and accountability duties

The ECB will soon become the dominant institution for banking surveillance in the euro area. Do particular transparency and accountability obligations result from the new tasks? And if yes, how can the latter be fulfilled?

In fact, the ECB should become even more transparent, when the bank will adopt the task of large banks surveillance next year. This makes sense because in case of a necessary bank restructuring this decisions met within this mandate may imply additional burden for the public budget (see Joerg Asmussen and Benoit Coeuré in Handelsblatt, 2013). In addition, the ECB will adopt competencies similar to law-making powers, since it is empowered to issue regulations concerning oversight. By publishing the deciding authorities the constitutional obligation of responsibility emerging from „clout" is obtained.

Seen on the whole, thus, accountability has to be enforced even more strongly than in case of ordinary monetary policy.

The ECB representatives should in the ideal case have to justify themselves in the European Parliament. Moreover, it is also in the ECB'S original interest to demand and finally also gain the maximum possible obligation to be accountable towards and democratic control through the European Parliament (see Joerg Asmussen on several occasions and Joerg Kraemer in *Handelsblatt*, 2013). Exactly this was not the case with the SMP and the announced OMTs and led the ECB into an uncomfortable predicament at the German Constitutional Court only recently (see Section 4.2).

The European Parliament could be given access to the minutes of the surveillance committee within the ECB and of the ECB Governing Council itself; insofar the latter are related to questions regarding financial oversight issues. Information regarding company secrets of single banks or specific group of banks must be exempted of course. In order to ensure the latter, one could make only the minutes of meeting of the newly created surveillance committees ranked below the finally responsible ECB Governing Council available to the public.

3.6. Limits to transparency and communication of central banks

The former ECB's chief economist, Otmar Issing, cautioned against a "crystalline central bank" (FAZ, 2006). What exactly are the limits to transparency and communication of central banks?

Surely, transparency becomes an issue if, for instance, the publication of minutes of the ECB Governing Council improves the markets' understanding of monetary policy.

At the same time, central banks must avoid to be driven by financial markets and their expectations. That is the reason, why, for example, central banks refrain from the ex-ante publication of the exact dates of planned interest rate movements. Equally important, is to counter market expectations that the ECB will change its official interest rates according to some "rule", perhaps linked to inflation or growth projections.

Furthermore, limits to transparency may also be useful to persuade "minority" ECB Members to agree with "majority" and to accomplish a stronger overall position for the whole body ("all commensurate majority positions initially started as minority positions", Joerg Asmussen, cited in *Der Spiegel*, 2013). Finally, there may be instances in which secrecy may be important, for instance in fighting speculative bubbles (Hans-Peter Gruener, cited in *Handelsblatt*, 2013).

Some claim that limits to transparency are justified when the publication of the minutes would lead to "undue" attention to the discrepancies between declarations to the media by single members and in the public discussion, which could give rise ambiguous signals and detrimental effects to ECB's (OMT) policies (Fratzscher et al., 2013). This argument is does not look plausible as the OMT discussion has already taken place extensively on a European level within key institutions, including Monetary Experts Panel of the EP

An additional benefit of high transparency would be that potential deviations of the ECB from a stability oriented monetary policy would be brought to the surface. This would protect individual Council members against undue pressure from national governments (Belke et al., 2005). From this perspective, the publication of minutes would *foster rather than damage a stability oriented monetary policy*.

4. CONCLUSIONS

I would like to conclude with a citation from Davies (2013): "Overall, today's developments tell the markets [that]..... any exit from extraordinary accommodation by the Fed is not likely to be followed by other central banks, which are more likely actually to ease in response to any global effects from the Fed. Markets have already responded to this".

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