EUROPEAN PARLIAMENT

DIRECTORATE GENERAL FOR INTERNAL POLICIES

POLICY DEPARTMENT A: ECONOMIC AND SCIENTIFIC POLICY

Monetary Policy Responses to the Crisis by ECB, FED and BoE

NOTE

Abstract

The monetary policy responses to the crisis by the Federal Reserve, the Bank of England and the European Central Bank have been different because of the large differences in their institutional set-up, structural differences in the financial markets and economic differences. These differences also influenced the use of the non-conventional or non-standard monetary policy measures.

IP/A/ECON/NT/2012-04 JUNE 2012

PE 475.117 EN

This document was requested by the European Parliament's Committee on Economic and Monetary Affairs.

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LINGUISTIC VERSIONS

Original: EN

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Manuscript completed in June 2012.

This document is available on the Internet at:
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EXECUTIVE SUMMARY

Monetary policy responses to the crisis by the FED, the BoE and the ECB have been different because they show large structural differences:

- They had to respond at different times: 2007-2008 in the case of the FED and BoE and 2009-2011 in the case of the ECB.
- The problems to be addressed were different: the FED and the BoE were trying to solve a subprime banking crisis and the ECB a sovereign debt banking crisis.
- Their monetary transmission mechanisms (MTM) are different: In the case of the FED and the BoE the majority of the MTM is mainly done through financial markets and in the case of the ECB is mainly done through banks.
- The FED and the BoE deal with a single Treasury and a single sovereign debt while the ECB needs to deal with seventeen Treasuries and sovereign debts.
- The FED and the BoE have more than one primary objective for monetary policy, while the ECB has only one primary objective: price stability.
- The lender of last resort function of the ECB, given its present Statute, is much more limited than that of the FED and the BoE.
- Decision making at the ECB is much more complex and difficult than that of the FED and the BoE.
- The ECB is less transparent in its decision making than the FED and the BoE because it does not publish the minutes of its Governing Council meetings.

The use of "unconventional or non conventional measures" (as are they named by the FED and the BoE) or "non standard measures" (as they are called by the ECB) has been also been different for the following reasons:

- The ECB has been much more timid at reducing interest rates (even increasing them in years of low growth or recession), and are still kept at 1% when the euro area is going to be in recession in 2012 and when medium term inflation expectations are below the target. By contrast, the FED and the BoE have reduced interest rates down close to the zero lower bound, that is, when only unconventional monetary policies need to be introduced to avoid a liquidity trap.
- The FED and the BoE have discussed and even proposed all possible unconventional monetary policy measures to avoid a liquidity trap, while, in the case of the ECB, no discussion is known because it does not publish the minutes of its Governing Council meetings.
- The true non standard measures taken by the ECB through the SMP and Covered Bond Programs have been rather small compared to the FED and the BoE and have been done not to lower interest rates below the lower zero bound and to increase internal demand, but to improve the monetary transmission mechanism, so they can be taken at any interest rate level. By contrast, the LTRO, which has been massive in the case of the ECB, is a measure based on achieving financial stability because the interbank market is not functioning and the banking system has been renationalized and not as a measure aiming to escape from a liquidity trap. Moreover, a large part of the liquidity taken by the banks is re-deposited at the ECB reducing its total effect.
- The ECB may be forced to intervene in a massive and non standard way and to force its Statute in order to become the "saver of last resort" of the euro, given the total lack of confidence of investors and markets on the political leaders of the euro area.

1. DIFFERENCES TO BE CONSIDERED

Responses by these three central banks may be different given a series of temporary and structural differences, which are the following:

First, the epicentre of the crisis, which became almost global, has been located in the US during the period 2007-2009 and then it has moved to Europe and, notably, to the euro area (EA) at the end of 2009-beginning of 2010. Therefore, FED, BoE and ECB monetary policy responses to the crises have been done at different times.

Second, in both cases the nature of the crisis was financial and it was produced by a fall in financial asset prices, but in the case of the FED and the BoE it was mainly centred around subprime assets which did not have the value that they were supposed to have and, in the case of the ECB, it was mainly centred around sovereign debt, the risk-free asset by definition, which is the key asset to perform monetary policy by central banks and which is mostly used by banks as collateral.

Third, in terms of monetary transmission mechanism, in the US, only 25% of corporate external financing is done through banks and 75% is done trough financial markets. In the euro area it is exactly the opposite, 75% of corporate external financing is done through banks and only 25% is done through markets. In the UK external corporate finance is done around 50% through banks and 50% through markets.

Fourth, the US and the UK have a single sovereign Treasury bond and Treasury bill market because they have had a single fiscal policy and a single Treasury issuer for more than two centuries. Therefore it is easier for the FED and the BoE to perform monetary policy than for the ECB, which has to deal with 17 different Treasury bond and bill markets.

Fifth, the ECB has only one primary objective, while the FED and the BoE have more than one. Article 127 of the Treaty on the Functioning of the European Union states that the primary objective of the European System of Central Banks (ESCB) shall be the to maintain price stability, and its second sentence states[1]: "*Without prejudice to the objective of price stability, the ESCB shall support the general economic policies in the Community with a view to contributing to the achievement of the objectives of the Union as laid down in Article 3 of the Treaty on European Union*". To this objectives belong according to Article 3(2) TFEU "*sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress,...*". The price stability target is set at an average Harmonized Consumer Price Index (HCPI), weighted by the relative GDP of each Member State in the Union, below 2% but close to 2% over the medium term. Moreover, Article 127(5) TFEU stipulates that the ESCB shall contribute to the stability of the financial system and the Eurosystem mission statement includes safeguarding financial stability as well.

The FED has received a Congressional mandate (Section 2A of the Federal Reserve Act (1913, amended in1977) which states that the Board of Governors of the Federal Reserve System and the Federal Open Market Committee shall maintain long run growth of the monetary and credit aggregates commensurate with the economy's long run potential to increase production, so as to promote effective the goals of maximum employment, stable prices and moderate long-term interest rates. Its target for price stability is measured by the consumer price index of personal consumption and its present target is 2% in the long run. Its present estimated long run rate of unemployment aims at a central tendency around 5.2% to 6.0%.

[1] This section is partly based on de la Dehesa (2006).

The BoE has two main purposes: monetary stability and financial stability. The monetary stability target consists both of achieving stable prices (being its present medium term target 2%) and achieving confidence in the currency by safeguarding its value in terms of what it will purchase at home and in terms of other currencies. The financial stability target consists of a sound and stable financial system, including financial markets and the London Stock Exchange. The BoE should detect and reduce threats to de financial system through the Bank's financial and other operations, including that of a "lender of last resort".

Thus, the ECB objectives are narrower than those of the FED and BoE, because it has only a primary objective, price stability and the others are subordinated to the first. In any case, in spite of these limits, the ECB has been able to do some form of quantitative easing (QE) through its Securities Markets Programme (SMP) and launch the long-term refinancing operations (LTROs) providing massive liquidity under its financial stability mandate of Article 127 TFEU. The FED has three main objectives besides monetary stability, which are: long run growth, maximum employment and moderate long-term interest rates. The BoE is the one mentioning financial stability as a major goal and mentions expressively the "lender of last resort" operations as a mean to achieve financial stability.

The lender of last resort function of the ECB is more limited than that of the FED and the BoE. Article 18 of the Statute of the ESCB allows the ECB and the national central banks to buy and sell, repurchase, lend and borrow all kinds of claims, marketable instruments and currencies, to achieve the objectives of the ESCB. Nevertheless, Article 123 of the TFEU prohibits directly monetary financing of the euro area Member States, through overdrafts and credit facilities and to purchase "directly" from them debt instruments. That means that the ESCB can buy debt instruments from Member States in the secondary markets, as the ECB has done during the crisis, provided they are necessary to fulfil the ESCB objectives.

For this reason, the Securities Markets Programme (SMP) was established because "*severe tensions in certain market segments ... are hampering the monetary policy transmission mechanism and thereby the effective conduct of monetary policy oriented towards price stability in the medium term"*.[2]

Sixth, inflation targeting, using the short term nominal interest rate as the instrumental variable, is the most common system used among central banks today. They tend to follow monetary policy rules based mostly on the "Taylor rule", in order to stabilize the economy in the short term but maintaining long-term growth. Nevertheless, there are also differences about their monetary strategy to achieve these objectives or targets.

The FED follows a quantitative monetary strategy to achieve a long run growth of money and credit compatible with the growth of potential output, that is, similar to a "Taylor rule" with an inflation targeting set at 2% in the long run. The BoE uses inflation targeting with a target of 2% as well. The ECB also uses inflation targeting, without saying it, but not pure, because inflation projections are not the only tool to make decisions. Staff projections are taking into account as an important input of economic analysis together with other monetary and credit forecasts.

Nevertheless, monetary strategies by these three central banks are converging to adapt to reality. The recent build up of asset bubbles in some countries has made some inflation targeting central banks to watch more carefully the evolution of monetary and credit aggregates as has done traditionally the ECB.

Seventh, the ECB decision making in monetary policy is done through a more complex system of governance than that of the FED and even more than that of the BoE. ECB

2 http://www.ecb.int/press/pr/date/2010/html/pr100510.en.html

monetary policy decisions are made by its Governing Council (GC), which is composed of 23 members: 6 permanent members of the Executive Board, including its President and Vice President and 17 central banks governors of the euro area Member States.

In the US, monetary policy decisions are made by the Federal Open Market Committee (FOMC), which is composed only of 12 members: the 7 members of the Board of Governors of the Federal Reserve System including its Chairman, the President of the Federal Reserve Bank of New York, who is Vice Chairman of the System and 4 of the remaining Reserve Banks.

In the BoE monetary policy decisions are made by the Monetary Policy Committee (MPC), which is composed of 9 members: the Governor of the BoE who is its Chairman its 2 Deputy Governors, the Chief Economist, the Executive Director of Markets and 4 external members appointed directly by the Chancellor of the Exchequer, who need to have expertise in the field of economics and monetary policy. A representative from the Treasury also sits at its meetings who can discuss policy issues but does not vote.

Therefore, according to probability theory, it should be more difficult to take monetary policy decisions among the 23 members of the ECB Governing Council than among the 12 FOMC members or the 9 MPC members. Given that the ECB is the only one that does not publish the minutes of the decision making body, it's difficult to assess whether this is the case.

The BoE MPC publishes its latest forecasts for inflation and output growth and a detail record of its meetings twelve days after the meeting.[3] It publishes its decisions with great detail of their discussions and the individual votes of each member. The FED FOMC also publishes the minutes of its meetings, three weeks after the date of the policy decision, which contain the overall discussions and the individual votes of each member in the policy decisions on the federal funds rate.[4]

The ECB by contrast does not publish the minutes of its Governing Council decisions, although its President, assisted by its Vice President explains at a press conference the decision taken. Its decisions, in case there is not a consensus are supposed to be taken by majority because the President has a decisive vote, but it is not known yet if they vote.

All these major structural differences need to be taken into account when comparing monetary policy reactions to crisis between the FED, the BoE and the ECB.

[3] The MPC minutes can be found on following webpage:
http://www.bankofengland.co.uk/publications/minutes/Pages/mpc/default.aspx

[4] The FOMC minutes can be found on the following webpage:
http://www.federalreserve.gov/monetarypolicy/fomccalendars.htm

2. UNCONVENTIONAL OR NON STANDARD MONETARY POLICIES

The most novel part of the monetary policy reaction to the crisis, both in the US and in Europe, has been the use of "non conventional" or "non standard" monetary policy measures taken by the three central banks. When the crisis is as deep and as long as the present one and short-term nominal interest rates have been brought down close to zero, inflation targeting and Taylor rules are not enough to overcome the low growth or recession that is looming in most developed countries. This is the reason why non standard monetary measures need to be deployed.

The problem today is even more difficult because, in spite of aggressive central bank easing in the US and the UK by the FED and the BoE, they have not yet been able to reduce the output gap down to the levels of 2007. The situation in the euro area is even worse because monetary easing has been minimal. Therefore, in 2012, there is going to be a small recession in the whole euro area and a "structural slump" in the euro area periphery. The combined level of output in the peripheral economies, including Spain and Italy, is still 7% below its 2008 peak.

There are different ways to do unconventional or non standard monetary policies when several major advanced economies are close to a liquidity trap: that is, when standard monetary policy becomes ineffective because nominal interest rates hit zero and both money and bills have a close to zero interest rate so that they become close to perfect substitutes. If the economy needs more monetary stimulus because demand is still well below the levels needed to reach full capacity in the medium and long term, the central bank cannot do anything because short-term interest rates cannot drop further. Non standard monetary policies are a way to achieve negative interest rates in order to avoid a recession after reaching a liquidity trap. The exception to this rule is the euro area, which in 2012 is going to be in recession with a high level of unemployment, while the ECB still holds its refinancing rate at 1%. There are three theoretical options to escape a "liquidity trap":

The first is by expanding fiscal policy because it becomes more effective than in normal times given that the normal "crowding out" of private spending through higher interest rates does not operate. As shown by Eggertson and Krugman (2010), when economies are undergoing debt deleveraging, the effects of fiscal policy could be very powerful because its multiplier becomes higher. Nevertheless, the political constraints are high in the US and the UK because they have already higher levels of debt than the average in the euro area. In the latter, only a few Member States have a fiscal situation that allows them to engage now in lowering taxes or increasing expenditures, but it would make a lot of sense if they do.

The second is by the central bank buying government debt or private debt at primary or secondary markets. In the US the FED has been buying Treasury bonds and bills as well as agency mortgage backed securities (MBS) but it needs Congress approval to buy private debt. The BoE has been buying only gilts and no private debt. The ECB has been buying some government debt from peripheral Member States in the secondary markets, but sterilizing these purchases.

The third and probably the most effective is to try to lower real interest rates by raising inflation expectations and by allowing inflation to be above the central bank normal target at least for some time. This is a radical solution but many economists, including Ben Bernanke, recommended Japan to do it a decade ago.

The present debate shows that most central banks act formally and informally as "flexible inflation targeters", that is, their policy is set to maintain a medium-term inflation target, but they can respond to deviations in output from potential, in the short term, by deviating temporarily from their medium-term inflation target. There are several options by which they can do so[5]:

First, conditional policy rules, such as Charles Evans, President of the Chicago FED proposed at the FED FOMC (2012). The main idea is to commit to a longer period of policy than the markets conceives as probable. The FED decision to keep policy rates low up to the end of 2013 is an example.

Second, to set higher inflation targets than the present ones, first proposed by Paul Krugman for Japan (1998), more recently by Olivier Blanchard et al. (2010) for any country under a liquidity trap and by Kenneth Kuttner and Adam Posen (2012).

Third, to target price levels paths and not inflation rates. For instance, when inflation is lower than target, a central bank can set a price level path that envisages higher inflation in the near term, while preserving the same medium or long term inflation target. Ben Bernanke (2003) Governor of the Federal Reserve Board did recommended this to Japan in 2003 and later William Dudley (2010) President of the New York FED discussed this option at the FED Board.

Fourth, setting nominal GDP level targets instead of price level targets. A nominal GDP level target would obligate the central bank to balance any shortfalls and could therefore be designed in such a way to make up for the output losses since 2007 putting more weight on output than on inflation.

Fifth setting exchange rate targets such as Lars Svensson (2006) who has advocated the idea of pegging the exchange rate to a weaker level and then allowing it to crawl, which becomes almost the same as a price level target, but much easier to put into practice by the central bank which does not change from inflation rate targeting to price level targeting.

The main risks from these unconventional monetary policies are that they may reduce the credibility of the central bank, but given the present situation in most advanced countries they may be worth being discussed and eventually being taken. It all depends of being able to change expectations so that their efficacy depends in part of creating a self-fulfilling prophecy. This is the reason why FED Board members Evans and Bernanke and BoE MPC Posen and Bean have made proposals, which have been discussed even if not taken except for the more conventional of the unconventional options.

Within the OCDE members, only the New Zealand central bank did raise its inflation target by 0.5% in 2002 and the Swiss National Bank put a floor to the Euro/CHF exchange rate at 1.20 in 2011. It could be that others follow very soon as recession expectations increase. President Evans described his proposals as consistent with the FED existing dual mandate and the same apply to President Dudley nominal GDP target. In the UK BoE, similar decisions could be made but they would need to be endorsed by the Treasury.

In the case of the ECB it has been possible to take non standard measures and even discuss others which are even more unconventional because its Governing Council could interpret its own mandate. Nevertheless, it is not possible to know if it has been discussed because the ECB does not publish its minutes as does the FED and the BoE. Recent history shows that when taking monetary policy decisions the FED leads and the BoE and the ECB follow ten months later on average. (Gawyn Davies, 2011).

[5] These five policy options can be found on the following webpage: http://ftalphaville.ft.com/blog/2011/10/27/714446/a-goldman-guide-to-the-monetary-policy-playground/

Jean Claude Trichet (2012) recognizes that the nature of unconventional and non standard measures has been significantly different on the two sides of the Atlantic because the financing of the economies is structurally different.

3. NON STANDARD MONETARY POLICY MEASURES AND CENTRAL BANK BALANCE SHEETS

Until February 2012, the ECB has massively expanded its balance sheet. This was mainly done by using its long-term refinancing operations (LTROs), providing liquidity to banks with a maturity of up to three years. Some have this "*called the equivalent of the quantitative easing*"[6] (QE) to the FED and the BoE. Nevertheless, these ECB non-standard operations of repo lending up to three years "*only aim at ensuring a proper transmission of monetary policy"* given the present absence of a functioning interbank market in the euro area *"and could conceptually be undertaken at any level of interest rates (Fahr et al 2011)"*[7]*.* Therefore they are not really the same as quantitative easing (QE) done by the FED and the BoE, which aim at avoiding a liquidity trap at zero lower bound of interest rates.

Moreover, the amount of the ECB liquidity loan operations was mainly determined by the demand for funds (banks) and not by its supply (ECB). Hence, the ECB is not proactively deploying monetary policy to stimulate demand. By comparison, the FED and the BoE buy a bond (asset) and create in the process the equivalent amount of reserves (liabilities). Therefore the amount of the balance sheet expansion is their choice.[8]

Pisani-Ferry and Wolff (2012) show "*that in both the US and the UK the surge of repo lending to financial institutions was short-lived. It took place during the disruption of the interbank market after the Lehman bankruptcy and was unwounded during 2009*". In the case of the ECB they continued sporadically with a massive increase in December 2011. Furthermore, in the US and the UK government bonds purchased under the framework of credit easing or QE largely substituted repo operations from 2009 onwards. By contrast a large part of the ECB balance sheet increase was due to repo operations.[9]

Moreover, Pisany-Ferry and Wolff (2012) note, that at the end of March 2012, commercial banks placed in total EUR 700 billion at the ECB using its deposit facility.[10] They are further noting, that banks in southern Europe accounted for 70% of this programme versus only 20% before the crisis because bank loans are growing in northern euro area Member States and contracting in southern euro area Member States.

The problem in the euro area is that there is not a real banking union, not even a euro area banking market, since banking and financial markets have been renationalized, making it much more difficult for the euro area peripheral Member states to be able to avoid a credit crunch in order to get out of their present recessive situation. The ESCB is trying to avoid the worst by channelling all banking operations through the Eurosystem and their Target2 system.

[6] For this chapter see also Pisani-Ferry and Wolff (2012): http://www.voxeu.org/article/ltro-quantitative-easing-disguise

[7] Pisany-Ferry and Wolff (2012): http://www.voxeu.org/article/ltro-quantitative-easing-disguise

[8] See for this also: http://www.economist.com/blogs/freeexchange/2012/02/ecbs-ltro-and-feds-testimony/print

[9] See Pisany-Ferry and Wolff (2012) for exact numbers.

[10] Thereby losing 75 basis points (the difference between the ECB lending and the deposit rates) showing that it was a clear substitution of the interbank market.

4. EFFECTS OF NON STANDARD OR UNCONVENTIONAL MONETARY POLICIES

In the euro area, most unconventional policies have been made because the ECB has a mandate of financial stability to help the banking system performing its duties and supplying credit to the economy. But it has not a clear mandate for helping directly the euro area economy by lowering interest rates by other means, except its small Securities Market Programme. By contrast, the US and the UK have taken unconventional fiscal and monetary measures being aware and anticipating what was going to happen. Today, both are doing much better than the euro area in terms of unemployment.

In spite of all this serious situation, the ECB keeps its refinancing rate at 1% (after having increased it last year) and has done very little QE to lower interest rates by other means when, according to the IMF (World Economic Outlook, April 2012), the euro area is going to be the only region in the world with negative growth in 2012, while the advanced countries will grow at 1.4% and the US and the UK at 2.1% and 0.8% respectively. Moreover, by 2017 the IMF estimates that growth for the euro area will be only 1.7%, versus 3.3% for the US and 2.8% for the UK. As a matter of fact, the FED and the BoE have just announced at the same time another round of QE, while the ECB is not moving in that expected direction yet.

Moreover, the euro area is getting closer to a serious breakdown because markets have lost totally their confidence in the way this crisis is being managed and start to believe that it may suffer a serious recession and, eventually, a breakup of the euro area. If that would happen it will be the end of the Monetary Union, which will represent the end of the Internal Market, which will destroy the Custom Union, the other two pillars of the European Union. That will end 55 years of huge European efforts to achieve economic and monetary integration.

European leaders should be aware of how much they are risking with their long standing policies of "too little too late" and "foot dragging", besides not being able to anticipate the negative effects of the crisis and having committed incredible policy mistakes since the beginning of the crisis. This crisis is more political than economic.

Therefore, markets today have lost completely confidence in the euro area leaders, but not yet in the ECB and expect that it is the only euro area institution capable to save the euro area and the euro, which places a huge responsibility in its Governing Council and its President.

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