The ECB's Balance Sheet at a Glance

Quantitative Easing à la ECB - Now You See Me, Now You Don't

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Working Paper 01-09

Executive Summary

Is the ECB deploying a variant of Quantitative Easing in any fashion, way, shape or form?

If you are talking about Quantitative Easing senso strictu then my answer has to be a simple and straightforward no. However, if we stop being quite so by the letter of the book, and broaden our definition slightly, then I would strongly suggest that the battery of credit enhancing measures put in place by the ECB when taken together with the steady increase in securities accepted onto the balance sheet as collateral, do make it evident that the ECB - whether wittingly or unwittingly - has moved into some form of what we could at least call "quasi" Quantitative Easing.

Is the ECB indirectly monetizing the debt issuance of Eurozone governments?

If my initial answer to this question - before actually going through the books - would have been an outright yes, I now feel the need to tread much more carefully on this point, since I have most definitely not been able to conjure up that proverbial smoking gun. In fact, it has proved very difficult to establish any kind of direct link between the amount of funding drawn from the ECB refinancing operations and the purchase of government bonds by the MFIs at the national level.

This is not to say, however, that circumstantial evidence is not available that this process is taking place to some extent, and in some countries. I do believe, for example, that the massive purchase by Spanish MFIs of government bonds in that country does offer prima facie evidence that some such connection may well exist, and thus all I can say at this point is that further research is called for, and especially a much more detailed and discriminating data-mining dig-down.

What are the prospects and possibilities for a viable exit strategy for the ECB from its non-standard monetary policy measures?

The measures collectively known as Enhanced Credit Support are by their very nature flexible. However, if there is anything we have learnt from the operation of monetary policy in Japan over the last twenty years it is that premature exit from the sort of substantial support the ECB is offering only makes matters worse, and in addition this kind of massive liquidity easing is a lot easier to get into than it is to get out of.

A true economic recovery will inevitably be somewhat selective, and it is at this point that the ECB's problems will really start, since the recovery will begin in some countries and not in others. To take the extreme case: it will be awfully hard to maintain massive monetary easing for a Spanish economy which remains stuck in an "L" shaped non-recovery if in France headline GDP growth were to start to tick back again towards - say - 2%. Then the real dilemmas which face the ECB will begin in earnest. As such, it is going to be much more difficult for the ECB to instigate that dearly beloved exit strategy than many currently like to believe.

THE ECB'S BALANCE SHEET AT A GLANCE

Is the ECB Conducting Quantitative Easing?

What follows below is an attempt to conduct an accounting analysis of the Eurosystem's balance sheet[1]. I say "attempt" since I am certainly no accountant, and indeed am not really a specialist in the functioning of the ECB, but as a macro economist trying hard to understand what is actually going on in each of the individual national economies that constitute the euro area at the present time I have found myself almost compelled to carry out just this exercise. In particular I have set myself three questions that I would like to answer

- Is the ECB conducting Quantitative Easing and if so; what is ***QE à l'ECB*** actually?
- Is the ECB indirectly monetizing the debt issuance of Eurozone governments?
- What are the prospects and possibilities for a viable exit strategy for the ECB from its non-standard monetary policy measures?

Clearly, a yes answer to the first question is an evident pre-requisite for even getting round to asking the second one and in this sense you might already have guessed where I am ultimately going with this piece. However, I do hope that the analysis will in fact be backed by sufficient fact and figures - of which there will, indeed be plenty (sorry, if you find that tedious) in what follows.

The last question could be seen as a side issue in terms of the main topic, but in fact it is a critical one given that in the domain of monetary policy central banks undoubtedly reap what they sow, and so having a clear exit strategy from this kind of highly non-conventional monetary policy is going to be a vital part of the whole process, and doubly so since many argue - with or without sufficient hard evidence to back them up - that the rebound in activity that started last spring will in fact be stronger than initially expected (see recent statements from both the IMF and the OECD in this regard), so having the necessary escape clause could become a hot topic sooner rather than later, and in any event it isn't only boy scouts who need to work by the motto "always be prepared".

In order to be fair and frank from the outset, I do feel the need to point out to the reader that the underlying take on the immediate future of the global economy that underpins the discussion that follows is decidedly more pessimistic than most of the mildly

[1] (Unless stated otherwise, all graphs below are made from data taken from the ECB (mail me for an excel copy) and the y-axis is measured in '000 Euros. Click on the picture for better viewing)

optimistic narratives currently driving the mainstream discourse. Specifically, I am of the opinion, that the "hot spot" in the global economic and financial crisis has now most decidedly moved from the US over to Europe, and in particular has lodged itself on Europe's periphery. If this perspective has validity, then a proper and detailed look at the ECB's policy tools and how they are being deployed is indeed both timely and highly relevant. In this sense I have already implicit answered the questions above with a "yes", "yes", and "only with great difficulty". Let us see whether the facts support my claim.

1.0 Getting to Grips with the Basics[2]

From the outset I would like to stress the point that untangling the threads of how monetary policy actually works at the ECB and detailing how it is transmitted across the Eurozone economy is no easy task. In fact, the very idea of an ECB balance sheet is in itself a misnomer since in effect there is no such thing. Instead, what we have is something called the consolidated financial statement of the Eurosystem.[3][4]

Fortunately this effectively amounts to the same thing and therefore this consolidated statement will form the main source for the data I am going to present below. Data availability from the ECB[5] is generally extensive, although the data break-down does leave a lot to be desired, since much of the complexity is lost, as well as most of the gory details which would really allow us to fully answer the questions posed above. Such is the nature of the game however, and those of us who cast ourselves in the role of "ECB-ologists" simply have to make do with what we actually have got, and not dream of what we would like to have. But before we get into the actual nitty-gritty of the situation we should do a bit of basic housekeeping when it comes to the accounting of monetary policy in general and how this is done over at the ECB in particular.

In what is a standard textbook representation of an economy's consolidated banking sector Copeland (2008, p. 125) states that the central bank balance sheet in its most basic form is composed of gold and foreign currency reserves and lending to government on the ***asset side*** and issued currency on the ***liability side***. If you add this together with the balance sheet of the commercial banks with loans and central bank deposits on the asset side and public deposits on the liability side you get the consolidated banking sector and thus the definition of the money supply (M1) as foreign currency reserves + domestic credit on the asset side and public deposits + currency in circulation on the liability side.

Are you confused?

[2] Note that if you are well versed in central bank/ECB accounting, you may wish to skip this section.
[3] http://www.ecb.int/press/pr/wfs/2009/html/index.en.html
[4] http://sdw.ecb.europa.eu/reports.do?node=100000129
[5] http://www.ecb.int/stats/html/index.en.html

Well, if you are I can only offer little consolation since out there in the real world the situation is much more complicated and especially so when we get into the so-called unconventional measures and quantitative easing - where the balance sheets of central banks and their open market operations constitute a complex set of mechanisms that are really a reflection the growing complexity of financial markets.

In order for you to stand a fighting chance of following what comes next, I will briefly present a list of definitions of the important concepts. My focus will be on ECB lending to Euro area banks (credit institutions), the amount and nature of securities held by the ECB on the asset side, the use of Euro area credit institutions of the deposit facilities (liability side), and finally a brief glance at the kind of liabilities the ECB are holding (although these are effectively impossible to detail and all we are really left with is educated guess work). The definitions presented below can be found several places; you can find them in the website glossaries of all the main central banks as well as directly at the ECB.[6]

On the **asset side**:

Main Refinancing Operations - Lending to banks as a liquidity-providing operation executed regularly each week with a maturity of two weeks. This is an open market operation.

Longer term refinancing operation - Same as above, but conducted monthly and with a maturity of three months.

Marginal Lending Facility - A standing facility of the Eurosystem. Counterparties may use this to receive credit from a national central bank at a pre-specified interest rate against eligible asset.

Securities of Euro area residents - This should be self-explanatory and consists of marketable securities and in the words of the ECB; these "(...) may potentially be used for monetary policy operations."

On the **liability** side:

Banknotes in Circulation - Self explanatory and although I won't be giving much attention to this it is, naturally, the biggest post on the liability side (essentially the monetary base).

As subcomponents to the main post entitled ***Liabilities to euro area credit institutions related to monetary policy operations***;

Current accounts (to cover minimum reserve requirements) - Minimum reserves are essentially interest bearing deposits which credit institutions are required to hold with Eurosystem. The amount they must hold must, in any given month, be 2% of their liabilities (this is the basic rule).

6 http://www.ecb.int/press/pr/date/1999/html/pr990105_1.en.html

Deposit Facility - Another of those standing facilities of the Eurosystem where counterparties (i.e. banks or other credit institutions) may deposit liquidity overnight to earn a pre-specified interest rate. As an aside note here on QE; it is this kind of deposits that e.g. the Swedish Riksbank are now ***penalising*** banks for depositing actually ***charging*** money (i.e. the pre-specified interest rate is negative).

Liabilities to other euro area residents - With credit institutions covered above, this post is predominantly made up by liabilities held at the Eurosystem with general government as counterpart.

Debt Certificates - Is for all intent and purposes zero, but it is interesting to keep this one in mind since it would presumably be through this post that the ECB would potentially sterilize any direct purchase of marketable securities. The question popped up in relation to the announcement that the ECB would be buyers of covered bonds.

Ok, that should be it, at least for our relatively modest needs here. By following the above links you will rapidly become aware of the huge potential for further hunting, reading, and discerning definitions that the topic entails, as well as the formal workings of the operations of the Eurosystem. But for now, this will suffice.

2.0 Has the ECB been Conducting QE?

Central bank communication is a funny thing really and especially so when it comes to the ECB. So if you were to simply ask this question to a member of the governing council you would probably get a long description of the ECB's unconventional monetary policies followed by a firm ***non***! Now, one huge complicating factor here is of course what the heck QE actually is and although I won't roll out another big section containing definitions it is worthwhile to try to level the playing field a bit.

In this sense, we can say with absolute certainty that whatever kinds and degrees of QE you are talking about, including the formal definitions provided by theorists and practitioners of monetary policy, as a policy measure it is invariably connected to a rapid and aggressive expansion of the central bank balance sheet in the context of nominal interest rates situated at or very close to the zero bound.

In fact the whole Lehmann affair seems to have been something of a watershed in the Eurosystem's "enhanced credit support" operation, and lending to credit institutions has been remained at continuing high level ever since (despite some notable volatility).

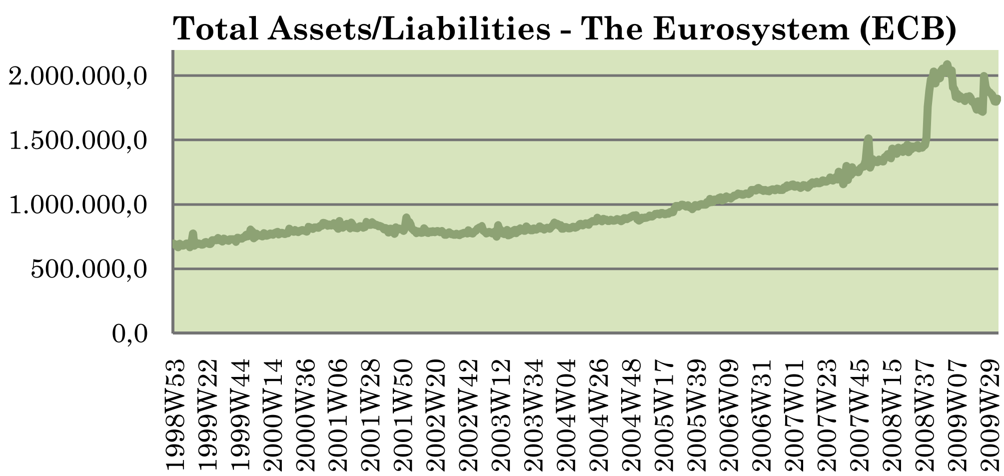
In what could be called the typical case, QE takes the form of the purchase of government bonds in order to carry out what is called a monetization of the government deficit, since in classic situations, like those in Japan over the last decade or so, the explicit objective has been to provoke a return to inflation. However, during the current financial crisis, central banks have been considerably more aggressive (creative) in their efforts to revive asset markets through e.g. purchases of asset-backed securities, commercial paper, or outright equities than they have in facilitating the issuing of public debt, since the objective has normally been to free up private credit, and not explicitly to fend off deflation.

> Top take the extreme case, it will be awfully hard to maintain massive monetary easing in a Spanish economy stuck in an "L" shaped recovery if in France headline GDP growth starts to tick back up to 2%. Then the real dilemmas will begin in earnest. As such, I would argue it going to be much more difficult for the ECB to instigate that dearly beloved exit strategy than many currently like to believe.

Moreover, and this is especially important in the case of the ECB, central banks have considerably widened the class of assets they are willing to accept as collateral for providing short term funding to troubled banks. As far as the ECB goes, QE has naturally been regarded as something of a no-no and in its stead the list of measures taken to combat the crisis has been classified under the rubric ***Enhanced Credit Support,*** and this is essentially composed of five subcomponents[7].

- the full allotment of banks' demands for central bank liquidity at fixed rates;
- the further expansion of the list of assets accepted as collateral in ECB operations;
- the lengthening of the maturity of ECB operations that were conducted over periods of up to one year;
- the provision of liquidity in foreign currencies, notably US dollars;
- direct purchases of covered bank bonds in order to revive this particular market segment, which is considered to be important in Europe.

With these points in mind, perhaps the best thing to do now is to take a tour through the numbers and charts - such as we have them. Our first chart plots the total amount of asset/liabilities of the Eurosystem since 1998 (that is since it first came into existence)

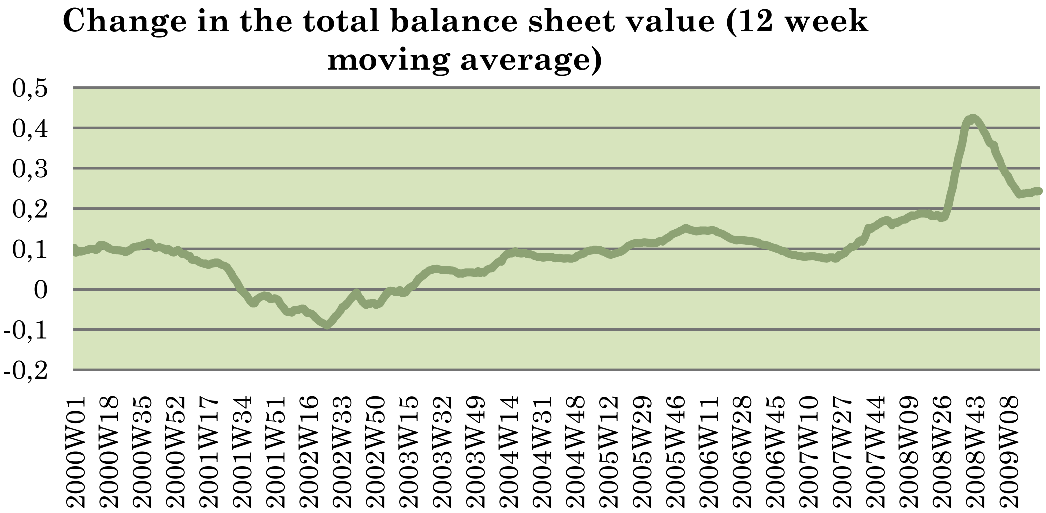


[7] http://www.bis.org/review/r090908b.pdf?sent=090908

It is not difficult to discern the imprint of the current financial crisis here since there are two evident jumps in 2007 subsequently followed by one large and enduring increase in 2008. The balance sheet in fact peaked in the first week of 2009 at a little under 2.1 trillion Euros mainly driven (see below) by an increase in the amount of credit supplied to Euro area institutions through the longer-term main financing operations.

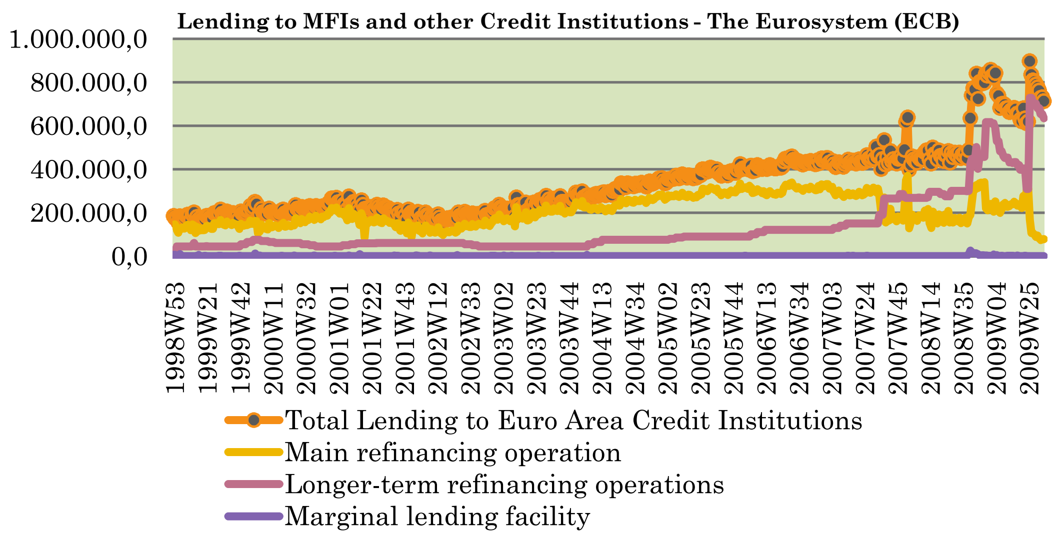
If we put this in historical perspective, the annual change in the value of the balance sheet for the first 35 weeks of both of the last two years has been substantially larger than at any other moment in the history of the bank's accounts - with the year on year increases coming in at 17.5% between 2007 and 2008 and 28.5% between 2008 and 2009.

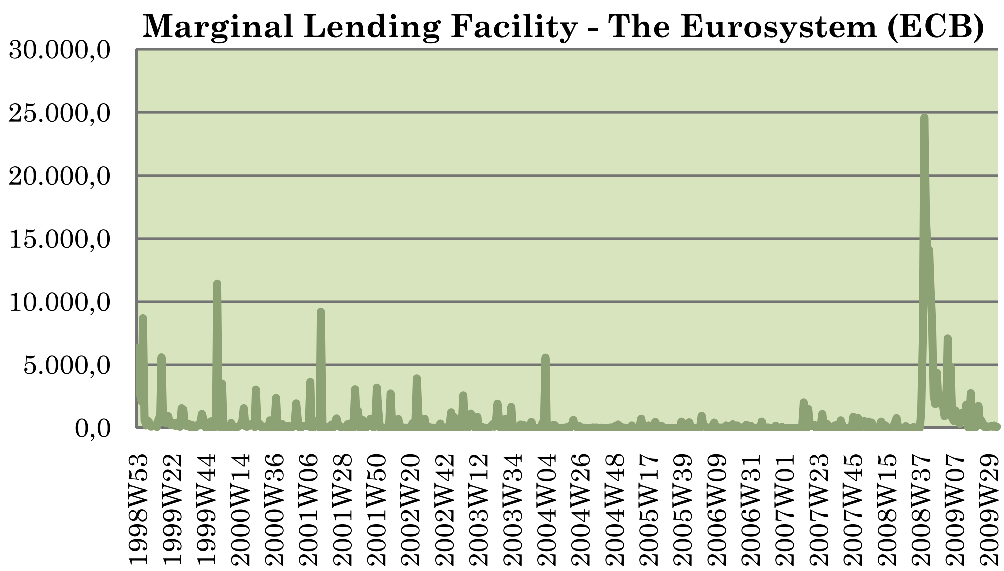
Calculated on the mean value of the first 35 weeks, the Eurosystem has seen a lasting increase in its balance sheet of 46% between 2007 of 2009 and although such calculations may be sensitive to the seasonality of financing operations the size of the increase does provide ample evidence of a significant and lasting expansion of the Eurosystem's balance sheet, especially in the aftermath of the Lehmann Brothers collapse in the autumn of 2008. In order to flush out any potential seasonality the graph below plots the 12 week moving average of the annual increase, in percentage, of the Eurosystem's balance sheet.



If we now go on to decompose the shift in the aggregate balance sheet a little, it is interesting to start looking at lending to Euro area credit institutions (i.e. the asset side). During the summer of 2007 - as it became evident that what we were facing was not simply a US-centered subprime crisis - the Eurosystem's lending to Euro area credit institutions jumped 18% in one week alone, while during the last two weeks of 2007 there was a further surge, and lending jumped by as much as 27%.

In both these cases, the financing provided to and absorbed by the financial system was largely surgical and very short term, as shown by the fact that liquidity was quickly withdrawn. However, when the balance sheet jumped a full 42% in the autumn 2008 following the chapter 11 filing by Lehmann Brothers - the increase became a more lasting one. In fact the whole Lehmann affair seems to have been something of a watershed in the Eurosystem's "enhanced credit support" operation, and lending to credit institutions has been remained at continuing high level ever since (despite some notable volatility). In this sense and looking at the issue strictly from the asset side, the balance sheet expansion story is largely one of a sharp increase in open market operations directed towards the Euro area financial system.





As can be seen to the right, up to only very recently the increase in liquidity provided through open market operations had been split almost equally between main refinancing and longer term financing (with a slight bias towards the latter). Most recently however, the maturity profile of the open market operations has moved decisively towards the longer term refinancing operations which suggests that the financing provided by the ECB to Euro area banks is now composed primarily of lending with a somewhat longer maturity. If we now focus on the last 12 months and compare the first 35 weeks of 2008 with the first 35 weeks of 2009 (i.e. January to date) the increase in lending to Euro area credit institutions makes up almost the entire increase in the Eurosystem's balance sheet.

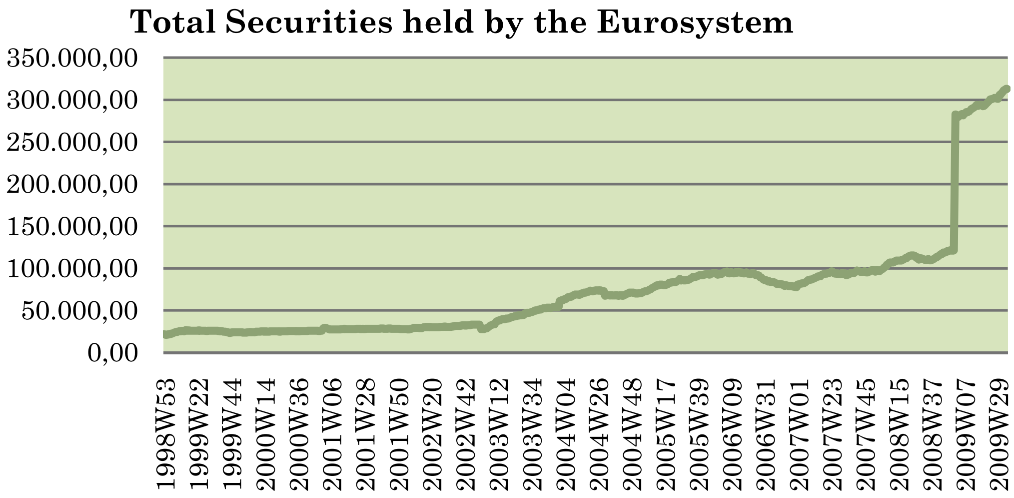
The marginal lending facility is barely noticeable in the aggregate figure which is why I have provided a separate chart for it. This is because; despite its relative small size it is not without importance. Now, the key issue in this context is of course the nature of the assets which the ECB has received in collateral for the credit outlays that have been substantial since the financial crisis turned global in the summer of 2007 (the big spike is in connection with the Lehmann collapse naturally).

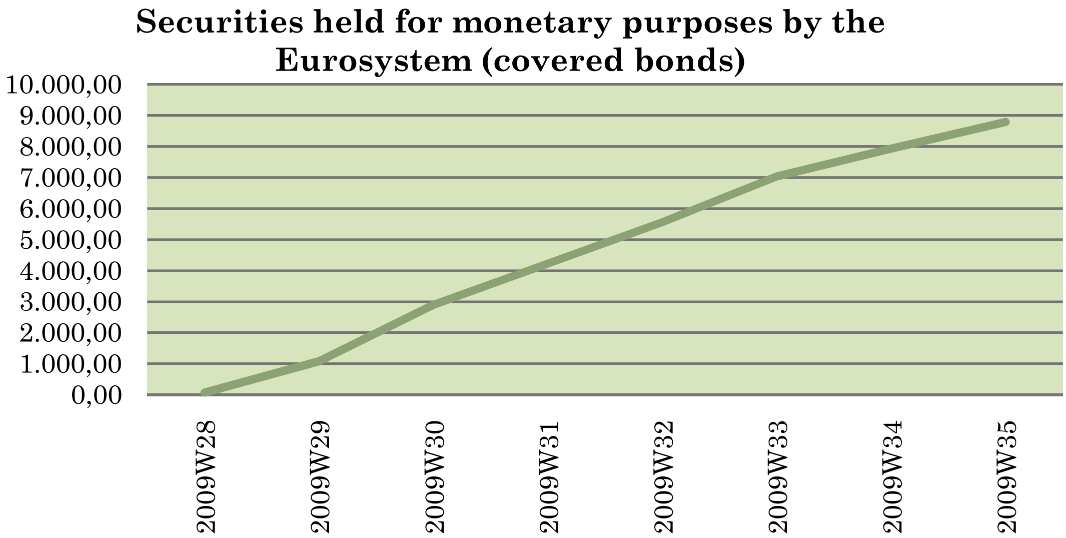
A total of bn. 155 Euros worth of credit has been given to counterparties on this account and notwithstanding the maturity of this credit (i.e. it has been overnight) it is worthwhile pondering the nature of assets received as collateral. To give you a sense of the magnitude of this number it is roughly bn 1.6 Euros ***more*** than what has been withdrawn from this facility in the ***entire*** period since the Eurosystem's inception in 1999 up until the summer 2007. The main point to emphasize here is presumably that there is a mismatch between the maturity of assets put in collateral and the liquidity provided. In short; the ECB is taking a direct risk here relative to the kind of collateral it is accepting.

Finally on the asset side we have the amount of (marketable) securities held by the ECB either for the purpose of conducting monetary policies. Up until the beginning of July this post was a big zero on the balance sheet and the sudden jolt into life coincides nicely with the announcement, by the ECB, to spend as much as bn. 60 Euros on covered bonds in the period July 2009 to end June 2010.

As of September 7th the ECB had purchased bn. 10.324 Euros worth of covered bonds and these purchases are almost certainly equivalent to the post entitled "securities held for monetary purposes" which at the end of week 35 (5th September) amounted to bn. 8.787 Euros. As these purchases are ongoing it is highly likely that at the time of writing this figure will have increased slightly. However, that still leaves us with a little more than bn. 300 Euros worth of securities unaccounted for. As can be seen from the graph below the overall securities post leaped upwards significantly at the end of 2008 for purely accounting reasons as the ECB itself explains[8].

[8] http://www.ecb.int/press/pr/wfs/2009/html/fs081231.en.html





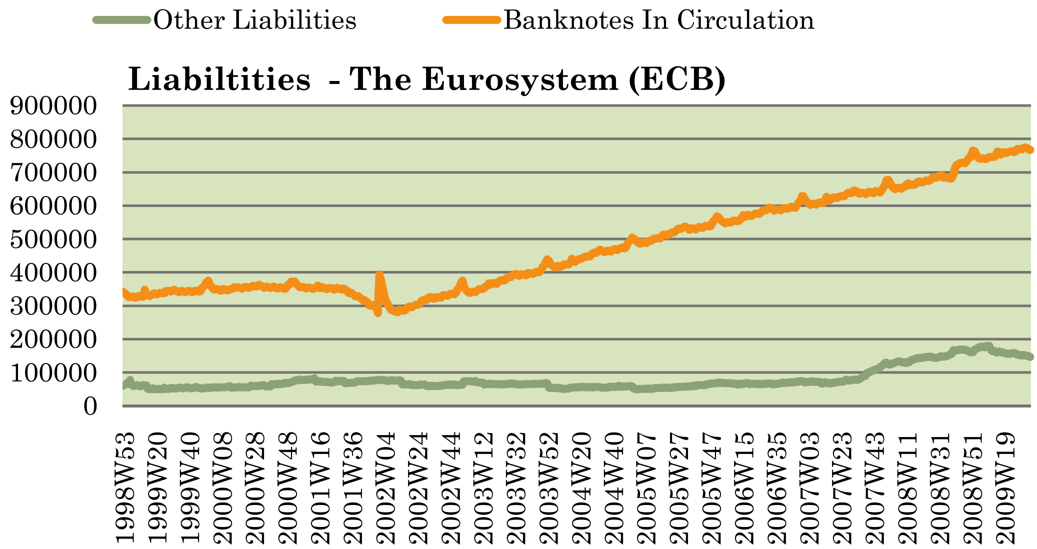
Obviously it would be very interesting to know whether the ECB (over and beyond the "monetary policy" covered bond purchases) has in fact been adding securities more aggressively since the start of the financial crisis as compared with earlier years. Of course, we have little idea of what these securities actually are, but perhaps precisely for that reason, it is interesting to take a look.

What we find when we do so is, however, that the cumulative increase in the years 2003 to 2005 (107%) was in fact much larger than the one which took place in the years 2007 to 2009 (46%), although we do have to remember that the 2009 figure only covers the first 35 weeks. If we now turn the attention to the absolute values involved, we find that the average annual increase in the securities entry (ex covered bonds) has been approximately bn. 10 Euros. Between 2003 and 2005, the ECB added bn. 57.1 Euros worth, while from 2007 to 2009 the figure rose to bn. 60 Euros (ex covered bonds). It is worthwhile to note here that in the first 35 weeks of 2009 and if we include the purchase of covered bonds (apprx. bn. 10 mill Euros) the securities post has been expanded by more than bn. 30 Euros which is approximately

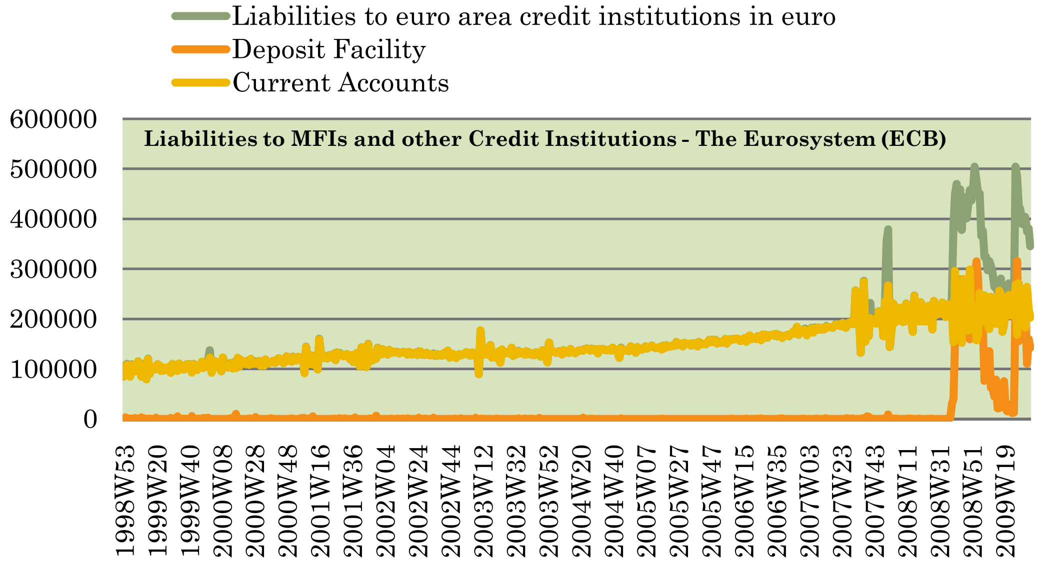
3 times as much as the average annual increase since the Eurosystem's inception.

Whether all this constitutes evidence of Quantitative Easing is of course another issue, but the real question which should interest us here is the exact nature of these securities. That being said it is difficult to deny that the pace of securities accumulation has significantly increased.

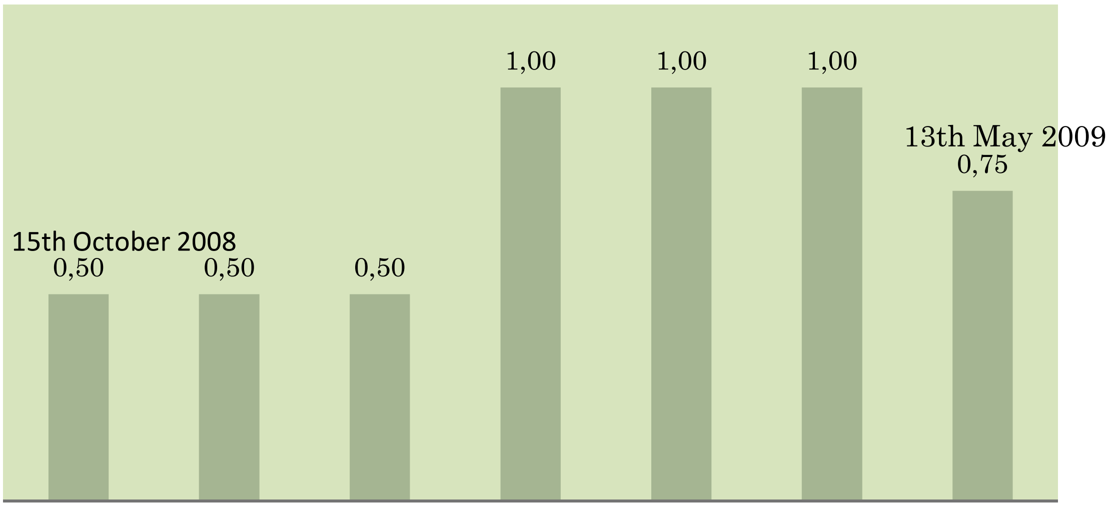
Moving over now to the liability side in order to try and see how this expansion is actually being financed one might reasonably have imagined that the ECB, in true QE style, would simply have started to let the printing presses roll. This is not, however, the case. If we treat week 34 2007 (around end-August) as week zero for the initiation of the global financial crisis, then the total balance sheet of the ECB has swollen by roughly bn. 614 Euros (about 40%) while the corresponding increase in the monetary base has been only bn. 131 Euros - or around 22% of the full increase in the balance sheet.



More interestingly, of the bn. 614 Euros increase in the balance sheet about bn. 136 Euros has been ***re-absorbed*** on the liability side through the use, by credit institutions of the ECB's deposit facility. This is to say that due to the way in which the majority of ECB's unconventional measures has been carried out through open market refinancing market operations the result has been that a large part of the money seems to have gone out of one door (and onto the banks' balance sheets - with the objective of trying to stimulate credit in the real economy) only to sneak back in through the other, via the use of the deposit facility. On a stock basis and again using the week 34 2007 as the main point of reference the deposit facility has grown by bn. 142 Euros, but more importantly, from a flow perspective, in times of risk aversion the deposit facility has often swelled to way above bn. 200 Euros and even in some cases bn. 300 Euros.



Spread on the deposit facility rate vs the main refinancing (fixed rate) since november 2008



Apart from drawing attention to an important technical issue the state of affairs I am describing also represents a problem for the ECB as far as its stated objectives go, since we can see clearly some of the limitations of the kind of open market operations the bank has been relying on. Even though the interest rate on the deposit facility has been held at an almost rock bottom level, given the heightened levels of risk aversion, many of the ECB's best efforts to ensure the smooth functioning of the money markets have simply ended up sitting there back on their own balance sheet. Of course, from a longer term perspective this state of affairs also offers us evidence of the extent of the credit crunch and the severity of the financial crisis.

It is worth noting here that since banks are not gaining on this transaction and thus there must be a precautionary motive for the heavy use of the deposit facility. As things stand at the time of writing, the marginal lending facility delivers credit at 1.75%, the main refinancing rate is 1% and the deposit facility yields only 0.25%. As noted above, some central banks (e.g. the Swedish Riksbank) are pulling out more aggressive weapons in an attempt to force money back into the real economy by imposing a penalty (negative interest rate) for making use of the deposit facility. The main point to notice in the present context is that while the deposit facility is effectively a short term, overnight facility it is in reality being treated as a much longer term deposit facility if we are to go by the enduring increase in the use of the facility by credit institutions.

Finally on the liability side, there is this small, and seemingly innocent, post entitled ***Counterpart of special drawing rights allocated by the IMF*** which is described as follows by the ECB[9];

A related balance sheet item is the liabilities item counterpart of special drawing rights allocated by the IMF, which shows the amount of special drawing rights that was originally allocated free of charge to the respective country/NCB on condition that the special drawing rights would have to be paid back under specific circumstances.

Of course, the real noodle in all of this is that after having been fixed at between bn. 5-6 Euros ever since 1999, the entry suddenly shot up 200% (in the past week) to bn. 40.7 Euros. Interpret this as you may; I am not going to move beyond observing that the sudden rapid growth is, on the face of it, somewhat surprising. At least, given that this is after all double-entry bookkeeping we are talking about, then those bn. 35 Euros or thereabouts must have a corresponding asset side entry somewhere and I would dearly love to know which one it was.

Summing up we have the following important points to extract from what we have seen so far;

- The balance sheet of the Eurosystem has clearly and noticeably expanded since the advent of the financial crisis; by roughly bn. 600 Euros. This increase has only found scantly reflection in terms of increases in the base money supply.

- The main route the ECB has used in providing liquidity has been via open market operations with the distinguishing characteristic that there has been a clear and noteworthy substitution of longer term for shorter term financing as the financial crisis has progressed. In general, we can state categorically the both the flow and the level of lending to Euro area credit institutions has increased sharply since the advent of the credit crisis.

- The purchase of covered bonds is clearly registering on the ECB balance but so is another bn. 300 Euros worth of securities which are essentially unaccounted in the sense that we don't have a usable breakup of their origin.

- Euro area banks continue to be heavy users of the deposit facility and this is, to some extent, an impeding factor when it comes to the effectiveness of the ECB's policy efforts.

So, to get finally through to the big question, is the ECB conducting QE

[9] http://www.ecb.int/press/pr/date/1999/html/pr990105_1.en.html#ftn.fnid3

Quasi-QE at the ECB

Well, given the fact that nominal interest rates are still not at the zero bound, one could of course end the discussion outright by responding with a flat no here. However, such a response would be too rapid, since there are some tentative signs which suggest that the ECB may well be close to, or even already in, what might best be called a kind of quasi QE state. Yet, the ECB has so far vehemently denied that it has entered any kind of quantitative easing of the sort the Fed and the BOJ have, categorically, and in any way shape or form of the beast.

Of course, following the announcement at the May meeting that € 60 bn would be allocated to buy covered bonds and then the recent bumper tender allowing Eurozone banks to borrow € 442 bn over 12 months at the prevailing rate of 1% it is difficult not to argue that, on some readings at least, we do have sufficient indicators to suggest that the ECB has added its name to the list of central banks who could be described as engaging some form of quantitative easing, even if the in the ECBs case they are doing so by resorting to the utmost stealth

Further evidence which points in the same direction could be found in the obvious increase, on the asset side, of securities as well as from the fact that the open market financing is now at a more permanent level as can be seen by the substitution of short term finance for longer term finance. However, we still lack real "smoking gun" type evidence to back the assertion that the ECB are in fact knowingly conducting Quantitative Easing, and this kind of conclusive proof would really only come if it were possible in some way or another to link the recent, and natural, increase in purchase of government bonds with the extension of ECB 12 month loans to the credit institutions. So it is to this topic that we shall now turn.

3.0 Is the ECB indirectly monetizing the debt issuance of Eurozone governments?

I really wish that I could present a conclusive argument here and demonstrate, by the adroit presentation of one or two simple graphs, that the ECB was indirectly (or perhaps even "secretly") financing the issuance of government debt in the Eurozone. If that could be done, it would be game, set and match, and the argument that the ECB was not conducting Quantitative Easing would no longer be left hanging, even by the slenderest of threads.

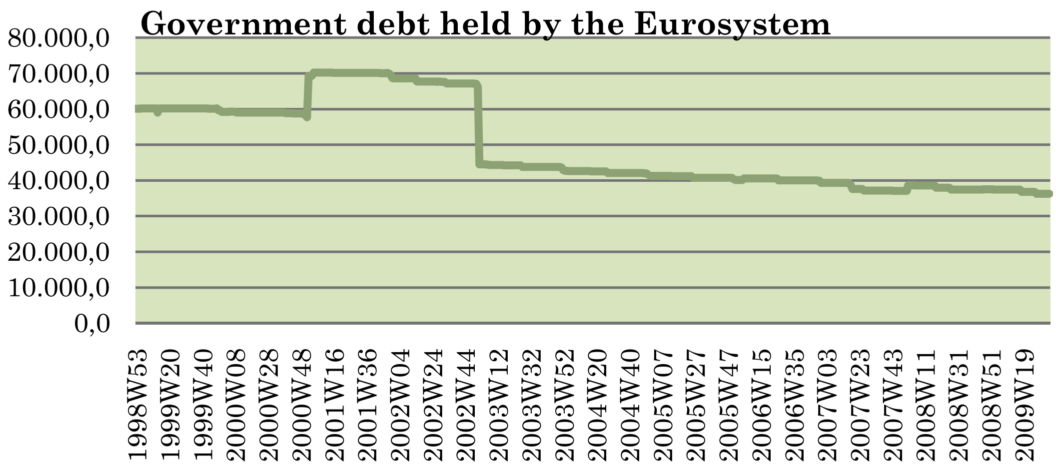
> That is to say, what happens in the event we see the dreaded "uneven recovery scenario" become reality - and Germany and France bouncing back while Spain, Greece and Portugal languish on the bottom (for example)

Unfortunately, this is precisely what I can't and you should take comfort in the fact that I looked at the data, I have tortured the data, I have tortured myself in torturing the data, but finally and at the end of the day it simply would not yield. Actually, the results I got from running a plethora of models even presented me with what could best be described as some pretty counterintuitive results. But before we get into that it would be interesting to look at the amount of government debt, which is at the end of the day held openly and directly, by the Eurosystem.

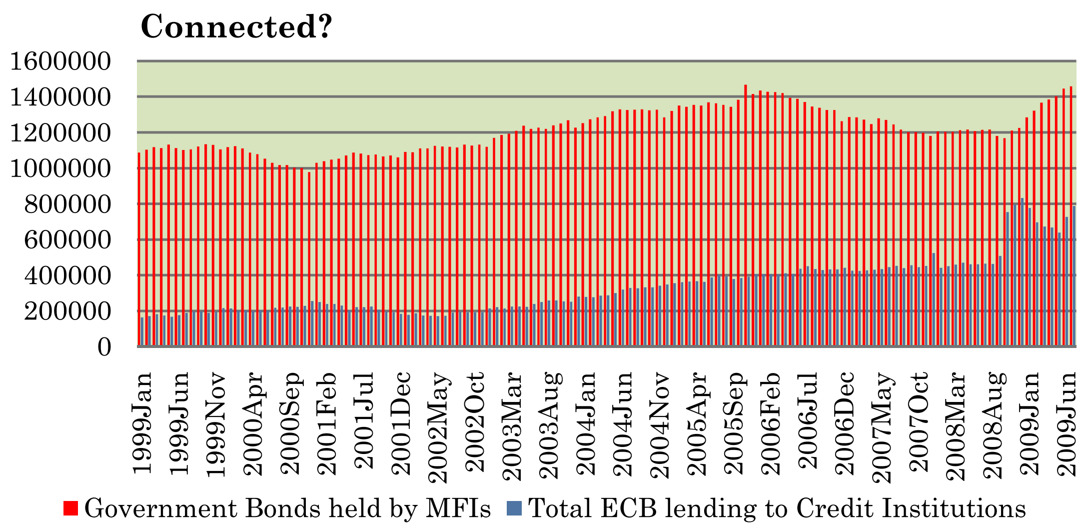
It is worth recognizing, however, right at the outset, that the relevant balance sheet post is for our present purposes totally innocuous, since the item is defined by the ECB in the following way;

General government debt denominated in euro shows outstanding non-marketable claims on euro area governments stemming from before 1 January 1994, from which date onwards EU NCBs could no longer provide credit facilities to governments or make direct purchases of debt instruments from governments. This debt will have to be redeemed by governments in due course.

So, this particular asset side entry is essentially a dormant one, and will gradually expire as the debt in question matures, or so at least this is how I read the situation.



Putting this entry to one side, perhaps we should now step back and start to look at mechanisms by which one could expect the ECB to indirectly finance euro area government debt. One relationship which would evidently seem well worth checking would be the one between the amount of credit supplied to credit institutions through open market operations and the purchase by MFIs of government debt.



At a first glance the relationship would appear to be perfectly normal. Especially it would seem that the spikes in both series which have accompanied the financial crisis coincide. However, once we start to manipulate the data a little this apparent relationship breaks down. For example, if you take these two time series in flows (and look at the first difference) and then test the change in lending by the Eurosystem as an explanatory variable for the change in purchases of government instruments you get a fairly strong negative relationship in almost all the representations I have tried, both with main refinancing and long term refinancing as a proxy for total lending to MFIs by the ECB. And trust me; I have chewed a lot on this data. I can rationalize this relationship by assuming that since spikes in open market operations are likely to occur in periods of high risk aversion credit institutions choose to keep the funding acquired in as liquid an instrument as possible (i.e. cash and not government bonds). But this may not be such a good rationalization. Basically, I am swimming in the deep end here and I need to look much closer into the general data to really get a handle of this relationship. Another possibility would be that the effect from the lending (especially the long term refinancing) operates with a lag on the purchase of government bonds; (anyone who knows about empirical studies please feel invited to chip in).

Leaving such considerations aside, we should note the fundamental incentive banks do have to borrow cheaply at the ECB and then invest in higher yielding, but relatively safe and relatively liquid, government instruments, in the process earning some form of "carry". So it is natural that banks should engage in this practice, and it is natural there their tendency to do so will vary according to the particular stage of the credit cycle, as risk sentiment rises and falls. But if we could establish that banks were engaging in just such a "carry" process on a systematic basic, and that this was even one of the principle outcomes of the long term funding provision, and that the ECB knew it was, then this would of course indirectly constitute evidence that the bank was actually conducting some form of QE and not simply applying liquidity measures with the exclusive intent of unblocking the credit squeeze and enabling banks to be better able to carry out their normal function of supplying credit to the real economy.

Perhaps we could put it like this, are the recent ECB measures exclusively directed to the liquidity provision objectives associated with the monetary transmission mechanism, or do they have other, more specifically macroeconomic objectives, like enabling governments to fund stimulus programmes to form a bulwark against the downward spiral in the real economy. There is, of course, no reason whatsoever that a central bank should not carry out such activity, indeed the central banks of Sweden, Switzerland, the United Kingdom, the United States and Japan all in some form or another do this, no reason other than the fact that the ECB charter, as constructed in the Maastricht Treaty specifically excludes this, as it is a form of fiscal policy. The problem is not, of course, with the policy itself, but with the ECB charter, but it is perhaps better to be clear about what is involved.

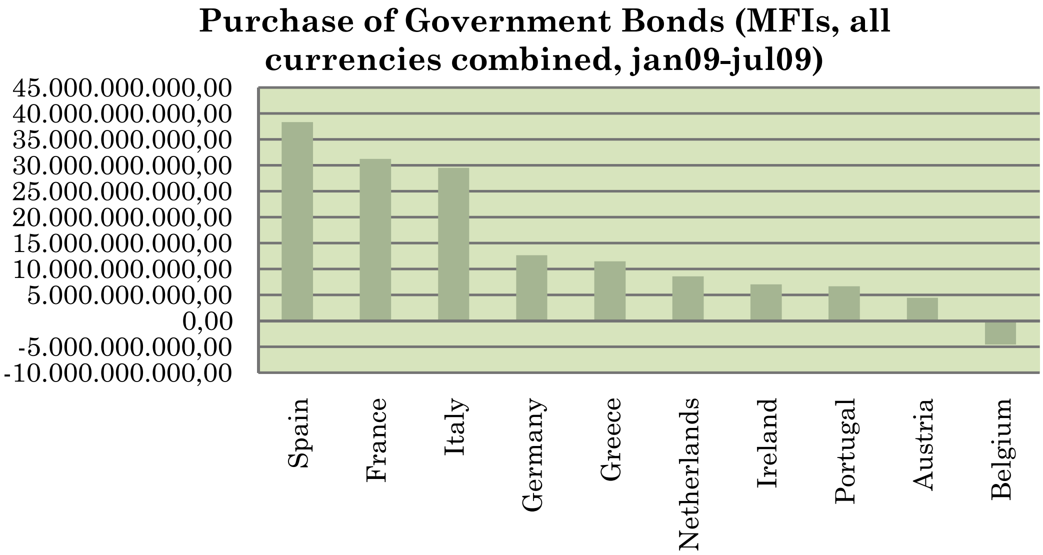
Naturally, and as is well explained by Barclays Capital analyst Laurent Fransolet in a June research note (no online link unfortunately, but see the monthly bulletin from the ECB, June 2009[10]) it is perfectly normal for MFIs (banks and money market funds) to buy substantial amounts of government debt at certain moments in the credit cycle, since, and being specific, they are simply riding the steep yield curve which implies that with low short term interest rates (which constitute a proxy for funding costs) it becomes both attractive and lucrative for banks to invest in government bonds, especially if we add-in the assumption that the appetite for acquiring risky assets remains rather low during the deeper parts of a recession. Thus buying government bonds has the added advantage of helping change the composition of a bank balance sheet. And even more so if the central bank is helpfully accepting toxic assets (at a discount) to help the banks restructure their balance sheets at one and the same time.

So, at least at the intuitive level, the mechanism by which an abnormally large and enduring provision of liquidity by the central bank at low funding costs (through open market operations) could spawn a significant shift into government bonds should be fairly easy to grasp.

However, as noted above, this relationship is in fact very difficult to document, even on an aggregate basis.

Laurent Fransolets work is helpful, however, since he digs down a little deeper and focuses his analysis on the differential purchasing of government debt as between countries in the eurozone by what are known as Monetary and Financial Institutions (MFIs, although as he notes, it would be even better to have a breakdown between banks and other forms of financial institution like money market funds). Now, according to M. Fransolet, far and away the largest purchasers of domestic government bonds were the MFIs in Spain, followed by those in Italy, Greece and Ireland. Not an insignificant list I think. Since Fransolet's original analysis more data have come out, thus taking January 2009 as a starting point, the increase in the stock of government bonds held by country sector MFIs looks like this;

[10] http://www.ecb.int/pub/pdf/mobu/mb200906en.pdf



One important detail to point out here is that the graph plots government debt of all currencies and thus also ex-Euro zone government bonds such as e.g. US government bills and bonds. This is of course a substantial distortionary factor, but the main point, I feel, remains intact. The fact that Spain comes in pole position is quite remarkable given the relative size of the Spanish banking system. The key here is of course the spread and more specifically the spread versus Germany bunds, and essentially how Southern Europe's and Ireland's effort to reboot their economies might lead to such a significant increase in spreads that it could strain the entire Eurosystem. In this sense, Fransolet puts it aptly when he says that;

"Hence, it seems that quite helpfully, banks in countries that have experienced large rises in government debt issuance (and wide spreads versus Germany) have been supporting their own domestic debt markets this year."

The main question that we all would like to pose (and to receive an answer to) is the extent to which the ECB is knowingly facilitating matters here behind the scenes. As previously discussed, this is very difficult to actually establish and it is clear that the ECB are not itself actively acquiring eurozone national government debt. But are they indirectly aiding and abetting others who are so doing. This is the question.

And it becomes a large and very important question given one evident feature of the current situation - all the above mentioned countries - Spain, Italy, Greece and Ireland are facing known and serious macro economic difficulties, and it is only natural that the ECB should be offering assistance to these countries in the difficult times we are living. But there is one very large and important difference between what the EU-IMF tandem are doing in countries like Hungary and Latvia in the East, which is to provide large and substantial liquidity support to maintain fiscal deficits in the face of a lack of investor confidence, but doing so on the basis of a very strict set of conditions relating to structural transformations, and the sort of fiscal liquidity support some suspect the ECB might be offering in Ireland and Southern Europe, where the political and structural counterpart is well nigh nonexistent.

4.0 WHAT ARE THE PROSPECTS AND POSSIBILITIES FOR A VIABLE EXIT STRATEGY FOR THE ECB FROM ITS NON-STANDARD MONETARY POLICY MEASURES?

The best and most obvious place to start if we want to try to answer this question is a very recent speech[11] given by Jean-Claude Trichet on exactly this point: the ECB's exit strategy. But before we get into this it is worth noting that while the markets discourse has tended to revolve around the "exit" question, central bankers and policy makers have in general been much more cautious.

> while the ECB evidently has the technical capacity to carry out a swift and timely exit - unlike, one could reasonably argue, the BOE, Fed, the SNB, the Riksbank and the BOJ - where the water has become completely muddied by the emerging fiscal role of the central bank, it is not at all clear whether they will have this ability in practice

In particular, the message that was sent from the annual central banking symposium in Jackson Hole was one of caution, and although policy makers have embraced the idea and need for a viable exit strategy, most of the major central banks signaled that rates are going to be kept low well into 2010 (if not longer, since they certainly have put no "end date") and certainly no one is anticipating any major changes during what is left of 2009. And this cautious sentiment has been repeatedly echoed by Trichet himself as he goes to great pains to forcefully point out on each and every time occasion that he is given the opportunity that while a viable exit strategy is important, ***now is not the time exit***.

The being said, the real question is of course, it is impossible not to ask ourselves the question: "when the time comes will it really be so easy for the ECB to unwind the current "temporary" measures?

Personally I have my doubts that it will be as easy as Trichet tends to suggest, and in any case, the unwinding of these measures would also be contingent on, as Trichet points out, the extent to which they are felt to conflict with the ECB's fundamental goal of maintaining price stability.

In this sense the exit strategy issue is intimately tied to the inflation outlook one, and I personally take the view that the impact of heavyweight debt deleveraging in the medium term and the ageing population dynamic in the longer term will probably peg the general price level much nearer to the deflation frontier in the years to come than many seem to contemplate. So my guess is that, as we have seen in the Japan case, what were originally intended as short term measures may well become entrenched, and the key aspects of the enhanced credit support - and in particular those originally intended to provide short term liquidity to banks - may turn out to be a more permanent feature of the Eurosystem than ever thought possible previously. This is to say, that as far as I can see the existence of these enhanced credit support

[11] http://www.bis.org/review/r090908b.pdf?sent=090908

measures is not going to be in conflict with the objective of price stability for quite some time to come.

Now time may of course be what proves me wrong here, and in just the same way as any balanced decision taking procedure over at the central bank should be taking account of alternative scenarios like the one I have just outline in making a risk evaluation, I too need to consider the extent of the challenge that would be facing the ECB if it needed to extract itself from all these "makeshift" should it find itself subjected to rising headline inflation pressures while the crisis itself continued to rage in some key areas of the eurozone.

That is to say, what happens in the event we see the dreaded "uneven recovery scenario" become reality - and Germany and France bouncing back while Spain, Greece and Portugal languish on the bottom (for example).

Clearly, M. Trichet sees it as a distinct virtue that the overall nature of the measures included in the enhanced credit support are all ***designed*** to facilitate an easy exit - however since the whole process of entry was essentially ad hoc and improvised, things may not turn out to be as simple as they seem.

Basically all the eurozone economies are still in intensive care, heavily sedated, and being run on life support in the form of massive fiscal stimulus from the national governments and enhanced credit provision from the ECB. But as with every hospital care unit following a major disaster. Some patients may simply recover more rapidly than others, and the issue is what to do in such cases, when you only have one standard setting available for the life support system.

The dilemmas which lie ahead become evident if we consider three simple points.

Firstly, all the main liquidity operations are offered via some kind of REPO agreement which means that they will all naturally expire over time.

Secondly the ECB expects demand for these liquidity provisions to dwindle over time as banks find their accounts steadily resting on a more solid footing.

Thirdly, and perhaps this is the most important issue for the ECB the outright purchase of securities has been kept to a complete minimum.

As regards the first two points, I would simply limit myself here to stating that I am very skeptical about their validity, but since the reason for my skepticism relates to macro arguments concerning the interaction between the real economy and the banking system which go well beyond the confines of this document I will simply state that it is my own humble guess that the ECB will more than likely need to renew the current agreements and in any case, in the unhappy event the liquidity provisions were prematurely withdrawn, we would soon enough find ourselves in a situation where they would need to be reinstated.

But it is the third point which is really crucial here, and in relation to this the following quote from Trichet on government bonds is extremely telling;

The fact that the ECB has refrained from purchasing government bonds is in line with this institutional framework. This approach avoids any possibly intricate interaction with other policy actors on decisions relevant for exit, and maintains a clear separation of responsibilities between the central bank and fiscal authorities.

Perhaps this is most striking difference between the ECB and other central banks when it comes to existing potential for the deployment of QE, or anything resembling it. Quite simply the current ECB charter prohibits it, or at least, this is the "reading" of the Maastricht Treaty which presently holds sway. WE should note however, that when it came to the need to issue EU bonds in order to rescue (or bailout) collapsing economies in Hungary and Latvia in the autumn of 2008, the appropriate clause was duly wheeled out of the Brussels back office, and we should not be surprised to see this kind of "reinterpretation" of the Treaty repeated, centuries of diplomacy have, of course, worked just like this.

In this context it is interesting to pick up some of the points made by William Buiter in a recent piece on his FT Mavercon blog[12]. What, he asked, is the real level of fiscal backing enjoyed by the various central banks, and what are the risks they are assuming in this context?

In the first place he points out - and this is directly related to the Trichet argument quoted above - the ECB may not buy government bonds in the primary market which basically means that the ECB may not bid on e.g. the auction of German bunds.

However, if a bank buys the same bund, the ECB may quite easily then repurchase that very same bond in the secondary market - which of course all adds fuel to the conspiracy theory bonfire that the ECB might be taking other routes in terms of supporting the debt issuance of Eurozone governments.

Buiter's argument on the Eurozone is elegant in that he points to the apparent contradiction that while the very reason that the ECB is not engaging in outright purchase of government securities is the structural absence of fiscal coordination (and the default risk of some governments has consequently risen far too high), at the same time the very reason we observe a tendency towards wider spreads in the case of some specific countries is the that implied default risk is higher ***precisely*** because there is no official, unified support system to guarantee the debt of any single government. Indeed, irony of all ironies, the Maastricht Treaty was specifically drafted to try to avoid this very eventuality.

An entirely valid reason for the ECB/Eurosystem to refuse to engage in either outright purchases of private securities or in unsecured lending to the banking sector (or to the non-financial enterprise sector directly), is that there is no 'fiscal Euro Area', just as there is no fiscal EU. The absence of a fiscal Europe that matters here is a narrow one. I am not talking about the absence of a significant supranational fiscal authority in the EU (or in the Eurozone), with significant tax, spending and borrowing powers -one capable of material system-wide fiscal stabilization and cross-border redistribution. I am talking instead about two related fiscal vacua.

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[12] http://blogs.ft.com/maverecon/2009/03/fiscal-dimensions-of-central-banking-the-fiscal-vacuum-at-the-heart-of-the-eurosystem-and-the-fiscal-abuse-by-and-of-the-fed/

The first vacuum is that there is no single fiscal authority, facility or arrangement which can re-capitalize the ECB/Eurosystem when the Eurosystem makes capital losses that threaten its capacity to implement its price stability and financial stability mandates.

The second related vacuum is that there is no single fiscal authority, facility or arrangement which can re-capitalize systemically important border-crossing financial institutions in the EU or the Euro Area, or provide them with other forms of financial support.

And don't for a minute imagine that the ECB cannot lose money on the securities it acquires, especially given the fact that the eligible asset base for collateral has been widened extensively. According to this ECB press release of 5 March 2009[13]:

In autumn 2008, five counterparties defaulted on refinancing operations undertaken by the Eurosystem, namely Lehman Brothers Bankhaus AG, three subsidiaries of Icelandic banks, and Indover NL. The total nominal value of the Eurosystem's claims on these credit institutions amounted to some €10.3 billion at end-2008. The monetary policy operations in question were executed on behalf of the Eurosystem by three NCBs, namely the Deutsche Bundesbank, the Banque centrale du Luxembourg and de Nederlandsche Bank. The Governing Council has confirmed that the monetary policy operations in question were carried out by these NCBs in full compliance with the Eurosystem's rules and procedures, and that these NCBs had taken all the necessary precautions, in full consultation with the ECB and the other NCBs, to maximize the recovery of funds from the collateral held.

Now Buiter's principal point is that in the event the ECB should suffer a large round of just such losses, there is no obvious way in which the system can be recapitalized. Of course, there seems no imminent likelihood of that situation actually arising, but then again, it appeared to many that in July 2007 there was no imminent likelihood of a global financial crisis. Are we being sufficiently prudent here gentlemen?
So, to sum up; while the ECB evidently has the technical capacity to carry out a swift and timely exit - unlike, one could reasonably argue, the BOE, Fed, the SNB, the Riksbank and the BOJ - where the water has become completely muddied by the emerging fiscal role of the central bank, it is not at all clear whether they will have this ability in practice. And this for one simple reason.

The ECB is not actively pursuing a policy of funding the growing pile of government debt in Austria, Ireland and Southern Europe, but it is in fact doing so as an indirect consequence of its actions. Thus, given that I think we can all assume that any eventual recovery will be uneven, unwinding liquidity provision in the aforementioned countries is going to involve very special problems, since evidently, if these governments seek to substitute free market funding for the current institutional one the spreads will evidently balloon again. And here is the dilemma, for those who can recover will, while the rest may be simply sent straight to hell.

[13] http://www.ecb.int/press/pr/date/2009/html/pr090305_2.en.html

5.0 Conclusion

Quite naturally, the conclusion on this piece has to come in the form of an answer to the questions posed as initial impetus for the investigation.

Is the ECB conducting Quantitative Easing and if so; what is QE à l'ECB actually?

If you define QE in the traditional way where nominal interest rates are at, or very close to, the zero bound as well where direct purchases of government debt is a key policy instrument, the answer has to be a straight no. In fact, as noted above; the Eurosystem may not participate in the primary market for government securities and on the rate front, the ECB has made it as clear as they can that 1% constitute a floor for nominal interest rates in so far as goes the relevant and current outlook. Yet, I would still venture that with the measures set in place by the ECB as well as the, after all, steady increase of securities of the balance sheet, the ECB has moved into some form or state of QE. This specific QE is primarily directed at providing liquidity to the credit institutions of the Eurozone through, basically, unlimited portions of liquidity at the main refinancing rate. Now, as the ECB would undoubtedly argue, such measures are very flexible in nature. Yet, I am not so sure. The thing is that although such open market operations were key measures taken by all central banks in the initial phases on the credit crisis to alleviate the seizure of the wholesale interbank market, the current operations are of a much more permanent nature than simple surgical skirmishes. Moreover, the demand is still very much there and it is important in this respect to note the substitution of short term for long term financing which is a further testament to the permanence of the measures.

Is the ECB indirectly monetizing the debt issuance of Eurozone governments?

If my initial answer here was yes I have to amend my answer substantially and if I had thought that I could have conjured up a smoking gun, I have so far fallen short of the task. In short, it has been very difficult to establish a link that made sense (!), between the amount of money drawn from the refinancing operations and the purchase of government bonds. This does not mean however that here isn't something about this anyway. I believe that e.g. the massive purchase by Spanish MFIs of government bonds is something which needs to be looked into in connection with the financing provided by the ECB. In effect, if we try to connect the dots on a pure rational level there is, in my mind, no doubt that Spain as a net external borrower is now effectively being financed indirectly through the liquidity provisions of the ECB.

What are the prospects and possibilities for a viable exit strategy for the ECB from its non-standard monetary policy measures?

That the measures which have collectively come to be known as Enhanced Credit Support are by their very nature flexible is beyond doubt. That being said, it is also beyond doubt that it is extraordinarily premature to talk about the ECB actually withdrawing from the "ample liquidity support" it is providing let alone narrowing its collateral base. If there is anything we have learnt from the operation of monetary policy in Japan over the last twenty years it is that premature exit only makes matters worse, and this kind of massive liquidity easing is a lot easier to get into than it is to get out of.

The most important factor here is undoubtedly that it seems very unlikely that there will be any "phasing out" of demand from the various MFIs for current levels of refinancing. Given the scale of the recent bumper tender, and the fact that it was of one year duration, all the really important questions will only start to surface as we approach June next year.

At present my views are conditioned by my appreciation of the general macro environment in the real economy, which is;

- The recovery will be much slower than the market consensus currently imagines, and we won't see real signs of green shoots until the second half of 2010, at the earliest.

- Thus, government stimulus programmes will need to be continued for longer than initially envisaged, and there was a clear recognition of this underlying reality at the last G20 meeting.

- Inflation pressures are going to be dampened, indeed we will more probably see mild deflation in the eurozone, and pressures for early exit will be thus limited

Beyond that of course, on day or another real recovery will begin in some countries, and at that point the ECBs problems will really start, since the recovery will be in some countries and not others. Top take the extreme case, it will be awfully hard to maintain massive monetary easing in a Spanish economy stuck in an "L" shaped recovery if in France headline GDP growth starts to tick back up to 2%. Then the real dilemmas will begin in earnest. As such, I would argue it going to be much more difficult for the ECB to instigate that dearly beloved exit strategy than many currently like to believe.

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In general, the ECB's own resources have been used extensively and especially the data warehouse. Please mail me if you want a copy of my excel sheet. Most links to the main references (ECB press releases and accounting notes) are given above and in terms of calculations they are all made by the author. Naturally, any mistakes or misinterpretations fall entirely on the shoulder of the author.