Global Economics View

ELA: An Emperor without Clothes?

- Emergency Liquidity Assistance (ELA) granted by the Central Bank of Ireland (CBI) has increased substantially in recent months.
- ELA is not part of the Eurosystem operations of the CBI – any resulting losses are not shared with the rest of the Eurosystem, and likely carry a State guarantee from the Irish sovereign.
- Increasing use of ELA highlights i) continuing funding problems of Irish banks, ii) increasing reluctance of ECB to fund distressed euro area banks, iii) question marks over the solvency of the consolidated Irish sovereign and banking sector.

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The Central Bank of Ireland (CBI) has recently substantially increased the amount of emergency liquidity assistance (ELA) it has granted to Irish financial institutions. In this note, we comment on the nature of this assistance and how it fits into the legal and procedural framework of the European System of Central Banks (ESCB) and the Eurosystem (the ECB and the National Central Banks of the euro area member countries). We also consider its implications for the indebtedness of the Irish sovereign and the overall stance of monetary policy in the euro area.

ELA — A National Matter, With Some Qualifications

ELA is not part of the Eurosystem responsibilities of NCBs. NCBs take responsibility and incur the costs – losses are not shared with the rest of the Eurosystem

The Emergency Liquidity Assistance (ELA) facility gives all national central banks (NCBs) in the euro area the ability to support domestic financial institutions, over and above the assistance provided by the Eurosystem. Providing liquidity support through ELA is not a function of the NCBs that arises from their membership in the ESCB or Eurosystem. It occurs separately from the non-standard measures (sometimes called Enhanced Credit support) which are provided by the Eurosystem to safeguard financial stability in the euro area and, by calming disorderly financial markets, restore the normal working of the monetary transmission mechanism.[1] Because ELA is not an ESCB or Eurosystem function, the decision to provide assistance through ELA to a financial institution operating in the jurisdiction of an NCB lies with that NCB. Article 14.4 of the Statute of the ESCB and the ECB explicitly allows NCBs to carry out functions that are not part of their role as members of the Eurosystem:

"14.4. National central banks may perform functions other than those specified in this Statute unless the Governing Council finds, by a majority of two thirds of the votes cast, that these interfere with the objectives and tasks of the ESCB. Such functions shall be performed on the responsibility and liability of national central banks and shall not be regarded as being part of the functions of the ESCB."

Article 14.4 thus highlights that, as the decisions regarding ELA are taken by the NCBs themselves, the costs and liabilities arising from ELA support are not pooled or shared by the other members of the Eurosystem. In particular, unlike operations carried out as part of the functions of the Eurosystem, any resulting gains or losses are not pooled and shared with the other members of the Eurosystem.[2]

Balance sheet exposure of NCBs through ELA is likely covered by State guarantees

Many ECB publications, such as the Convergence Reports or Opinions on law proposals, stress that the ECB considers financial independence of the ECB and the NCBs to be a key component of the obligation of member states to safeguard independence of the ECB and the NCBs from EA member states, EU bodies or other bodies. That obligation is stated clearly in Article 130 of the Treaty establishing the European Community and Article 7 of the Statute.[3,4]

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[1] According to Articles 127-5 and 127-6 of the Treaty on the European Union and the Treaty on the Functioning of the European Union (TFEU), the ECB has a mandate to support financial stability: *"5. The ESCB shall contribute to the smooth conduct of policies pursued by the competent authorities relating to the prudential supervision of credit institutions and the stability of the financial system. 6. The Council, acting by means of regulations in accordance with a special legislative procedure, may unanimously, and after consulting the European Parliament and the European Central Bank, confer specific tasks upon the European Central Bank concerning policies relating to the prudential supervision of credit institutions and other financial institutions with the exception of insurance undertakings."*

[2] For a discussion of the rules and conventions regarding gains and losses from monetary policy and other operations as part of the Eurosystem, see The Debt of Nations, Citi Global Economics View, 7 January 2011

[3] Article 130 of the TFEU reads: *"When exercising the powers and carrying out the tasks and duties conferred upon them by the Treaties and the Statute of the ESCB and of the ECB, neither the European*

Financial independence is supposed to be assessed from the viewpoint of whether any third party, most notably EA member state governments, is able to exert direct or indirect influence over the central bank. In the context of ELA and other activities NCBs carry out which are outside the remit of the ESCB/Eurosystem, ECB opinions have stressed that explicit State guarantees for any resulting financial obligations are required to guarantee compliance with the concept of financial independence of the ECB and NCBs.[5] And with respect to ELA, several member states have legislation in place, clarifying that any ELA granted by the NCB is underwritten by explicit State guarantees from the respective sovereign. Belgium is one example. But we have not been able to verify conclusively that all euro area member states have legislation in place that make such explicit state guarantees mandatory. In the case of Ireland, there is, to our knowledge, no public document available showing the existence of an explicit state guarantee for ELA liabilities and losses. However, the draft law discussed in the above ECB opinion in 2008 suggests that such explicit guarantees have only recently been enshrined in law in some countries, if at all.

The Treaty and ECB-ESCB Statute only stipulate that third parties undertake to respect the principle of independence of the ECB and NCBs with respect to powers and duties conferred to them by the Treaty and the Statute. But, again, ECB Opinions widen the interpretation of these clauses to include NCB actions that fall outside their ESCB functions. They make it clear that ELA is an area where NCBs are expected to act of their own accord and not on instruction from member state governments or other bodies.[6] But ECB Opinions are just that —

Central Bank, nor a national central bank, nor any member of their decision-making bodies shall seek or take instructions from Union institutions, bodies, offices or agencies, from any government of a Member State or from any other body. The Union institutions, bodies, offices or agencies and the governments of the Member States undertake to respect this principle and not to seek to influence the members of the decision-making bodies of the European Central Bank or of the national central banks in the performance of their tasks." The wording of Article 7 of the Statute which also covers independence is virtually identical.

[4] See e.g. the speech by ECB Executive Board Member Lorenzo Bini Smaghi on 19 April 2007 which includes: *"In November 1995 the European Monetary Institute (the precursor of the ECB) published a list of requirements for central bank independence. Over the years, the concept has been developed in the Convergence reports as well as in the ECB opinions on draft national legal instruments referring to central bank law. Four categories of central bank independence can be considered: functional, institutional, personal and financial."* The speech further discusses the most relevant issues that need to be addressed in order to safeguard financial independence.

[5] See e.g. Opinion of the European Central Bank at the request of the Belgian Ministry of Finance on a preliminary draft law on measures promoting financial stability and in particular establishing a State guarantee for the provision of credit in the context of financial stability (CON/2008/46) which states:

"Under the draft law, the State must guarantee to the NBB the repayment of any credit granted in the context of the NBB's contribution to the stability of the financial system and it must guarantee the NBB against any loss due to any transaction necessary in this respect. In order for emergency liquidity assistance provided with a State guarantee as collateral, as provided for in the draft law, to comply with the monetary financing prohibition, the following criteria should be met….Fourth, there must be no doubts as to the legal validity and enforceability of the State guarantee under Belgian law. In this respect, the ECB welcomes the fact that the establishment of the State guarantee is enshrined in the draft law. Fifth, there must be no doubts as to the economic adequacy of the State guarantee, which should cover both principal and interest on the loans, thus fully preserving the financial independence of the NBB. The State guarantee in this case is very broad since it covers any losses related to any operations necessary in the context of the NBB's contribution to financial stability."

[6] For example, the above quoted ECB Opinion states: *"As expressed in a recent opinion regarding another draft national law addressing the provision of emergency liquidity assistance by a Eurosystem central bank, the ECB is of the view in this case that the draft law should unequivocally ensure the NBB's independence to decide on the provision of emergency liquidity assistance. To this end, the draft law should stipulate that the same degree of independence is granted to the NBB as regards the provision of emergency liquidity assistance as with respect to the performance of its ESCB-related tasks* [Footnote 17: Alternatively, a reference to the same level of independence as provided for in Article 108 of the Treaty could be considered (see ECB Opinion CON/2008/42, paragraph 4.11, footnote 20)]." See also ECB Opinion CON/2008/42 of 10 September 2008 at the request of the Banque centrale du Luxembourg on amendments to the draft law

opinions. That is, they do not carry legal weight even though as official reflections of the view of the ECB, they often carry influence over policy at the EU/EA level or in member states.

ECB Governing Council can stop ELA with a two-thirds majority

So ELA is, for most purposes, a national matter, with details of its scope, terms and procedures to be spelt out in national legislation and arrangements, such as the national laws regarding their respective central banks.[7] But Article 14.4 of the Statute highlights that the NCBs do not have full freedom of action when it comes to granting ELA. The Governing Council of the ECB does not actively have to approve an NCB's ELA facility, but, according to Article 14.4, it can vote to stop an ELA facility from operating if at least two thirds of the votes cast oppose further ELA. As newspaper reports suggested, the threat (or fear) of the ECB Governing Council potentially vetoing a further increase in the scope and scale of the ELA of the CBI was probably instrumental in convincing the Irish authorities to ask for financial support from the European rescue facilities and IMF late last year.[8]

ECB aims to offset effects of ELA on total EA-wide liquidity and to coordinate responses in the EA to challenges to financial stability

Thus, the ECB has the power to stop NCBs from offering ELA, based on the grounds that it would interfere with, inter alia, the price stability and/or the financial stability mandate of the Eurosystem. In addition, NCBs are expected to provide the ECB and the rest of the ESCB/Eurosystem with timely information about their ELA activities, for two purposes. First, several ECB documents indicate that the ECB aims to offset or at least mitigate the impact of ELA on EA-wide liquidity and monetary policy, a point we revisit below. Second, the ECB and the ESCB/ Eurosystem profess to pursue a coordinated approach within the EA when it comes to financial stability — as they should, of course, in our view. With respect to both points, the ECB Financial Stability Review of December 2006 notes:

"The Eurosystem procedures ensure an adequate flow of information so that any potential liquidity impact can be managed in a manner consistent with the maintenance of the appropriate single monetary policy stance. These procedures on ELA are internal to the Eurosystem, but their smooth functioning is also linked to the wider arrangements at the EU level for dealing with the cross-border implications of financial crises."

The procedures noted above are laid out in various memoranda of understanding (MoU) which are, to our knowledge, not in the public sphere.[9]

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improving the legislative framework for Luxembourg as a financial centre and amending the Law of 23 December 1998 on monetary status and on the Banque centrale du Luxembourg.

[7] See http://www.ecb.int/ecb/legal/1341/96647/html/index.en.html for details of the legislative framework of NCBs in the EA.

[8] http://www.ft.com/cms/s/0/272b9490-1f37-11e0-8c1c-00144feab49a.html#axzz1BCNIeKTN

[9] An ECB presentation from 2007 notes three MoUs that form part of the arrangements concerning crisis responses in the Eurosystem, including ELA: An MoU between payment systems overseers and banking supervisors signed in 2001, an MoU between central banks and banking supervisors signed in 2003 and an MoU between central banks, banking supervisors and finance ministries signed in 2005. In addition, there are a number of regional MoUs (e.g. Nordic MoU, Belgium/Netherland MoU). See http://www.ecb.int/events/pdf/conferences/sfi/Strouzas.pdf

Terms and Conditions of ELA

Terms applied to ELA are not public, but ELA is likely granted at penalty rates and against collateral that is not accepted by the ECB in its own liquidity facilities

Since ELA is not part of Eurosystem operations, NCBs are not bound by the general operational rules of the Eurosystem and enjoy wide discretion over the terms they apply and conditions they attach to any ELA offered. In general, these terms and conditions are not public and we are therefore forced to draw conclusions from the publication of general principles by the NCBs and the ECB. However, the ECB has noted, again in various opinions, that ELA has to be consistent with the '*monetary financing prohibition*'(MFP) as defined under Article 123 of the Treaty.[10] Furthermore, the ECB opinions stress that in order for ELA to be consistent with the MFP, any ELA support offered would need to be i) temporary, ii) extended only to illiquid, but not insolvent institutions, iii) provided only when systemic consequences threaten, iv) provided against adequate collateral.[11]

In the Irish case, the Governor of the Central Bank of Ireland (CBI) stated that "*the emergency loans should be made at a penalty rate so that banks have an incentive to avoid getting into a situation of illiquidity"*.[12] While there are some indications that the CBI has provided the ELA with *"different collateral and larger haircuts"* compared to the collateral used for the Eurosystem facilities, it is not clear if a penalty rate has been applied. In case of an ELA provided by the National Bank of Belgium in 2008, a penalty rate was applied.[13] Assuming, plausibly in our view, that the terms of ELA are at least no more favourable than those offered by the ECB, it is likely that the collateral offered would not be accepted by the ECB. Otherwise there would not have been the need to use the ELA, because the Eurosystem is still providing all its open market operations with full allotment to all eligible counterparties, including any Irish bank, as long as the financial institutions have sufficient eligible collateral.[14] So the least we can assume is that the assets the Irish banks have offered to the CBI as collateral do not meet Eurosystem collateral requirements. Press reports have stated that in the case of Anglo Irish bank and EBS, the two institutions most likely to participate in the ELA in Ireland, the assets offered as

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[10] Article 123 of the TFEU notes: "*1. Overdraft facilities or any other type of credit facility with the European Central Bank or with the central banks of the Member States (hereinafter referred to as 'national central banks') in favour of Union institutions, bodies, offices or agencies, central governments, regional, local or other public authorities, other bodies governed by public law, or public undertakings of Member States shall be prohibited, as shall the purchase directly from them by the European Central Bank or national central banks of debt instruments. 2. Paragraph 1 shall not apply to publicly owned credit institutions which, in the context of the supply of reserves by central banks, shall be given the same treatment by national central banks and the European Central Bank as private credit institutions."*

[11] See e.g. the ECB opinion on Belgium quoted above: *"It is noted that, under Article 237(d) of the Treaty, the ECB is entrusted with the task of monitoring the compliance of the NCBs with the prohibition on monetary financing and, as pointed out in a recent opinion, it is important, in the case of emergency liquidity assistance supported by a State guarantee, to provide for appropriate legal safeguards in terms of central bank independence and compliance with the monetary financing prohibition.4.2 The provision of emergency liquidity assistance is a central bank function, which consists in giving support in exceptional circumstances and on a case-by-case basis to temporarily illiquid but solvent credit institutions. However, it is the ECB's view that national legislation foreseeing the financing by NCBs of credit institutions other than in connection with central banking tasks (such as monetary policy, payment systems or temporary liquidity support operations), in particular to support insolvent credit and/or other financial institutions, is incompatible with the monetary financing prohibition. In this respect the ECB notes the clarification contained in the explanatory memorandum to the draft law, which states that a central bank extension of financial support to an insolvent financial institution must be considered as a form of prohibited monetary financing."*

[12] See "The Irish Banking Crisis Regulatory and Financial Stability Policy 2003-2008, A Report to the Minister for Finance by the Governor of the Central Bank", 31 May 2010.

[13] See National Bank of Belgium: Report 2008 Economic and financial developments, Chapter 8.

[14] The ECB publishes both the criteria it applies to assets to decide whether it accepts them as collateral in its facilities as well as a list of such marketable instruments on its website (http://www.ecb.int/paym/coll/html/index.en.html).

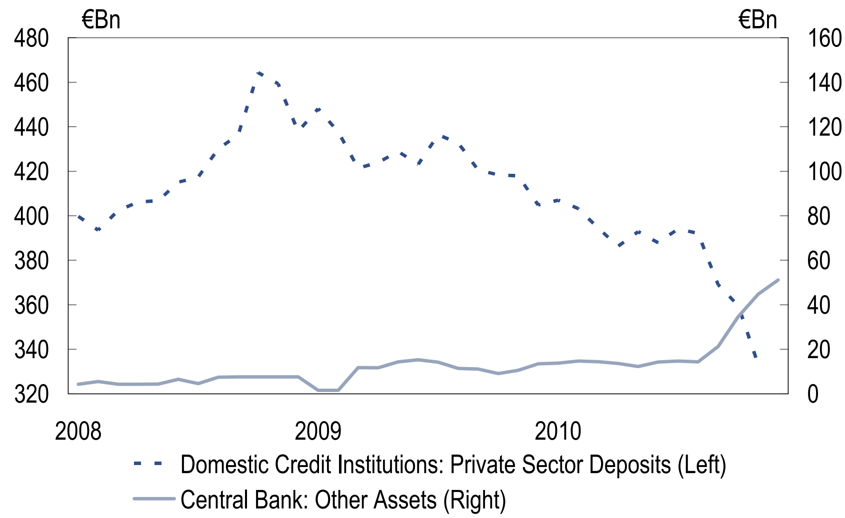
collateral have included promissory notes offered by the Irish government as well as NAMA bonds. But, the articles also note that the likely size of the amounts of ELA provided makes it likely that other assets have also been used.[15] Of course, without any information on what collateral is used and how/at what prices it is valued, even knowing the size of the haircuts applied would be of very limited use.

ECB and NCBs provide very little information on ELA, presumably as a deliberate act of policy

Little is known therefore about the terms applied to ELA, including interest rates, maturity and collateral requirements. It is also not clear how ELA is financed by NCBs. It could be financed via the creation of (overnight or term) deposits, or by running down other financial assets, or a combination of the two. If overnight deposits are created to grant ELA, it is possible that the liquidity provided under the ELA would be counted as part of the monetary base of the Eurosystem.

As we noted before, the ECB and the NCBs also do not publish details on their collateral holdings, the prices they paid or the valuations they attach now to the securities they hold as collateral as part of the monetary policy operations of the Eurosystem.[16] But in the case of ELA, the NCBs do not even publish the total amount of ELA outstanding in a timely manner. Only with a long time lag, at least some NCBs (at least in Ireland and Belgium) publish the size of the ELA in their annual reports. The secrecy surrounding ELA thus goes beyond that surrounding the ECB's conventional and unconventional monetary policy operations, as the ECB does at least publish the size of its total repo operations and of the Securities Markets Programme (SMP) purchases in a relatively timely way. What is more, although there are standards and guidelines under which the NCB's have to present their financial statements — which are put together to create the Eurosystem consolidated financial statement, published on a weekly basis — the treatment of ELA in the statement is not unified among the NCBs.

Figure 1. Ireland — Private Sector Deposits at Domestic Lending Institutions and Central Bank Other Assets, mainly representing ELA, 2008–Dec 2010



Source: CBI and Citi Investment Research and Analysis

15 See http://www.ft.com/cms/s/0/8796eb78-1fea-11e0-b458-00144feab49a.html#ixzz1BO3GlugY

16 See "The Debt of Nations", Global Economics View, 7 January 2011

ELA captured under 'Other Assets' on balance sheet of Central Bank of Ireland – suggesting €49bn was outstanding in January 2011

In the Irish case, the ELA support is recorded as "*Other Assets*" on the balance sheet of the CBI.[17] As the CBI's 2009 annual report shows, the CBI started to provide ELA in 2009 and at the end of that year the amount of ELA outstanding was already €11.5bn. Assuming that the other components in the *Other Assets* category, which had a volume of around €1.3bn at the end of 2009, have not changed substantially since then, ELA probably accounted for around €49bn of the total amount of Other Assets of €51.1bn in December 2010. It is worth noting that in September 2010, Other Assets only stood at €21.2bn. Hence, ELA provided by the CBI partly offset the reduction of deposits of Irish domestic lending institutions (see Figure 3).

As would be expected, the secrecy surrounding ELA is not coincidental, but rather a deliberate act of policy, supposedly out of a concern for safeguarding financial stability. Thus, an ECB opinion from January 2010 explicitly discourages NCBs from greater transparency in this area, as it notes: "*In this regard, information on central banks' lending or other liquidity facilities provided to a particular credit institution, including emergency liquidity assistance, needs to be kept confidential in order to contribute to the stability of the financial system as a whole and maintain public confidence in a period of crisis*."[18] An answer given by ECB President Trichet in response to a question about ELA at an ECB press conference in December 2010 is also telling.[19]

Above we noted that, at least in the interpretation of the ECB, the monetary financing prohibition in the Treaty would be violated if ELA were granted to an institution that was not just illiquid, but insolvent. Of course, the distinction between the two concepts is notoriously difficult, and especially so during periods of high market stress and very volatile asset prices. Nevertheless, in the Irish case, it appears that the main beneficiaries of ELA were institutions whose solvency must at the very least have been in question even at the time ELA was provided. It certainly is now in our view. In the above-cited Report to the Irish Finance Minister the CBI Governor notes: "*However, the main difficulty lies in determining whether the bank really is solvent. For this, one cannot rely on what will all too often be a self-serving and over-optimistic assessment from the troubled bank. Instead, the regulator must have assembled the necessary information and analysis to provide the needed advice."* National regulators may have potential conflicts of interest themselves, if the banks applying for ELA got into trouble on their watch, and it would be desirable and prudent to get an objective, independent assessment on ELA borrower solvency from a third party. After the disappointing results of the first two rounds of bank stress tests, the European Banking Agency (EBA, the successor of the CEBS) may have disqualified itself as the obvious alternative.

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[17] Central Bank and Financial Services Authority of Ireland Annual Report 2009

[18] Opinion of the European Central Bank of 11 January 2010 on a proposal for a directive of the European Parliament and of the Council amending Directives 2003/71/EC and 2004/109/EC (CON/2010/6)

[19] Journalist*:" I also have a technical question on the balance sheet of the Central Bank of Ireland. There has been an increase in other assets, which could mean some kind of emergency lending. Are national central banks able to make emergency loans available outside the normal ECB financing operations? Is this something that the ECB discusses or votes on?" Trichet: " On your second point, we have a doctrine covering the emergency liquidity assistance (ELA) and I have nothing to add to it, this is a standing concept"* http://www.ecb.int/press/pressconf/2010/html/is101202.en.html

Implications for Monetary Policy and Total Liquidity

ECB does not completely offset the effects ELA on total liquidity and the monetary stance in the EA

Above, we noted that there is a presumption that, in general, the ECB aims to undo the effects of liquidity granted through ELA on EA-wide monetary policy and liquidity. In practice, this would imply that once the NCB provides ELA and has notified the ECB of the amount of liquidity provided, the ECB has to adjust the Eurosystem's provision of the (net) amount of liquidity in the system. The obvious way in a normal provision of liquidity through a fixed amount tender with variable rates would be to reduce the amount of liquidity provided in the Eurosystem liquidity operations. Alternatively, the ECB could withdraw liquidity by creating term deposits.

But a few points are in order. First, as with any other statements to the effect that certain actions are 'sterilised', these are impossible to verify (except under very rarified conditions that don't prevail in practice), because the counterfactual — the evolution of the Eurosystem-wide monetary base in the absence of the ELA — is not observed. Second, since ELA is offered on terms different from those in the monetary policy facilities of the ECB, the single monetary policy stance is certainly compromised. Third, under the current full allotment procedure of liquidity, the ECB does not in fact set a quantitative target for liquidity and thus cannot apply its normal 'sterilisation approach'. This suggests that total liquidity in the EA financial system would increase by the full amount of the ELA, on the assumption that the banks making use of the ELA could not have obtained any additional funding from the Eurosystem.

Against that conclusion, it might be argued that liquidity in the current system is entirely demand-determined. Hence, the total amount of liquidity should be unaffected by ELA, as the liquidity of ELA would be just a perfect substitute to the liquidity provided by the Eurosystem. But that view neglects the difference in collateral requirements: ELA granted will most likely occur against collateral that the ECB would not accept. Our view is that, without ELA, the banks taking advantage of ELA would be rationed out of increased access to the Eurosystem. Of course, the fact that the ECB continues to operate a full allotment procedure suggests that it is not per se too concerned about the total quantity of liquidity in the EA currently and will potentially regard this loss of monetary control as 'de minimis'.

But, the reluctance of the ECB and the NCBs to discuss ELA suggests a certain uneasiness about the loss of monetary control and potential negative reputational and financial repercussions. At the same time, the acquiescence of the ECB so far, including not using its veto, suggests that the ECB may not be unequivocally opposed to these measures. For some time now, the ECB has aimed to reduce its involvement in providing liquidity to financially weak and zombie banks, particularly in the periphery countries. The ECB has therefore tried to push member states' fiscal authorities (*not the NCBs*) to take on more of that burden, but to rather little effect thus far, except for Ireland's acceptance of the inevitability of an EU/IMF bailout facility. As ELA support is national in nature and probably underwritten by State guarantees, it might help shift the credit risk exposure associated with providing liquidity support to weak banks to the national fiscal authorities.

ECB may accept ELA as a second-best measure to shift exposure to distressed banks to EA member states

In our view, after the recent ECB capital increase — a public signal of the ECB's reservations about the increased balance sheet risk associated with the Eurosystem funding a large share of the euro area periphery banking system - the use of the ELA instead of the Eurosystem facilities might be another step by the ECB to limit and reduce Eurosystem exposure to credit risk by moving it to the national fiscal authorities. But, to be clear, using ELA rather than the Eurosystem to provide liquidity to weak banks is viewed as a second-best solution by the ECB. Instead of having the NCBs involved in dealing with inadequately capitalized or insolvent banks, the ECB would rather like to see clear action by the national government, e.g. providing a sufficiently large European bank recapitalisation facility. In any case, it looks as though the ECB wants to go ahead with 'concrete steps' to reduce the 'addiction' of banks to ECB funding as ECB Board Member Mario Draghi recently mentioned in an interview with the FT on December 9, 2010.[20]

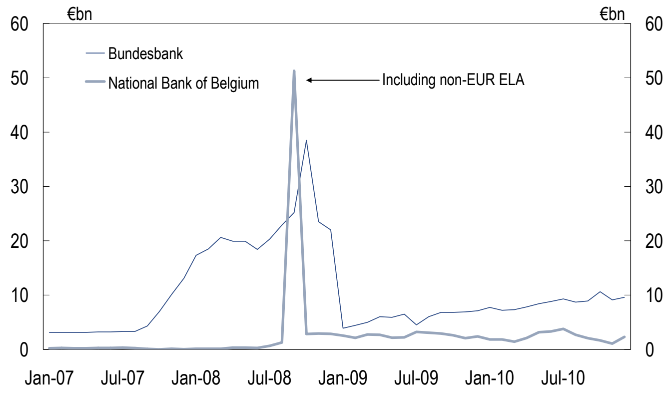
Quantitative Significance of ELA in the Eurosystem

Total amounts of ELA outstanding are not published in a timely manner by NCBs

ELA usually recorded under 'Other Assets' or 'Other claims on euro area credit institutions denominated in euro' on NCB balance sheets

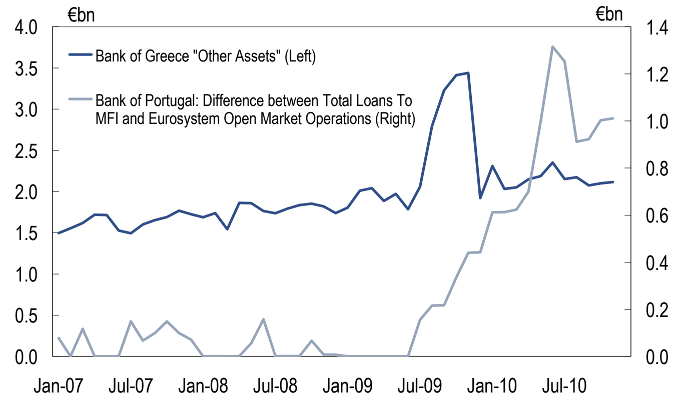
As we have noted, the NCBs provide little information about the use of the ELA. However, it seems that there are two categories where ELA shows up on NCB balance sheets and therefore on the consolidated financial statement of the Eurosystem. In general, ELA are either recorded under "*Other claims on euro area credit institutions denominated in euro*" or under "*Other Assets*", as in the case of Ireland.[21] While these two components of the Eurosystem consolidated financial statement are also influenced by other factors, the surge since the beginning of the financial crisis in 2007, with a peak around the Lehman collapse in Autumn 2008, suggests that several NCBs have used or still use ELA (see Figure 2, on the front page). Since the beginning of 2007 '*Other claims on euro area credit institutions denominated in euro'* of the Eurosystem have increased by around €34bn to €45bn (as of January 14, 2011) and Other Assets surged by around €75bn to €297bn in that period.

Figure 2. German Bundesbank and National Bank of Belgium — *Other claims on euro area credit institutions denominated in euro, 2007–Dec 2010*



Sources: Bundesbank, NBB, Citi Investment Research and Analysis

Figure 3. Bank of Greece Other Assets and Bank of Portugal Loans to MFI that are not Eurosystem Operations, *2007–Nov 2010*



Source: BoG, BoP and Citi Investment Research and Analysis

The Belgian and German central bank also used ELA during the financial crisis, but use of ELA in Ireland is much larger – it currently stands at around 31% of GDP

Data provided by the NCBs suggest that the Bundesbank and the National Bank of Belgium used ELA in 2008 (see Figure 4). The Belgium National Bank provided ELA of €51.3bn (including USD funding) in September/October 2008 – even exceeding the €49bn provided by the CBI to date - and the Bundesbank also used ELA (with a peak amount of around €38bn in October 2008). However, even in Belgium, the size of ELA provided relative to the size of the underlying economy (it peaked at 15% of GDP) was much smaller than the

[20] http://www.ft.com/cms/s/0/af24be36-03ca-11e0-8c3f-00144feabdc0.html#axzz1BCNIeKTN

[21] In the case of the National Bank of Belgium, a third category was used -- Claims on euro area residents denominated in foreign currency -- because of the provision of non-EUR liquidity.

current use of ELA in Ireland (ca. 30% of GDP). In the case of Germany the maximal size of the facility was 1.5% of GDP.

In Greece and Spain, balance sheet data released by the National Bank of Greece and the Bank of Spain reveal little evidence that these Central banks have used ELA extensively so far. In Greece, banks still extensively use the Eurosystem facilities (€95bn) and the amount of "*Other Assets*" has increased modestly by €0.6bn between January 2007 and November 2010, when the total amount was €2.1bn. In Spain there was no increase in the relevant balance sheet components in the course of 2010. In November 2010, "*Other claims on euro area credit institutions denominated in euro"* were €2.0bn and "*Other Assets*" were around €2.4bn. However, in Portugal the difference between the loans provided by the NCB to financial institutions and the amount of open market operations signals a use of ELA. From levels at or close to zero before July 2009, there was an increase in this gap to a record high of €1.3bn (0.8% of GDP) in June 2010 and it remained elevated at €1.0bn in November 2010 (see Figure 5).

How Does It Affect the Reality and Measures Of Irish Public Indebtedness?

ELA should be included, but likely is not, in calculations of the gross general government debt of Ireland – raising it by 31% of GDP in 2010

As noted above, ELA extended by the CBI amounted to around €49bn by January 2011. The OECD estimates GDP in Ireland for 2010 to be €157bn, so ELA would amount to around 31% of GDP.

The central bank is not included in the conventional definition of the general government sector (central, state, local plus social security and similar state funds). For many substantive economic issues, it is necessary to consider the assets, liabilities and financial surpluses of what we call the 'consolidated general government', that is, the consolidated general government and central bank. Even if one considers just the conventional general government accounts, it is clear in our view that, in the euro area, the assets acquired and liabilities incurred as a result of ELA provided by an NCB should be viewed as assets and liabilities of the national sovereign, that is, of the general government. In the Irish case, the assets and liabilities of the CBI that are held as part of the CBI's Eurosystem responsibilities and functions should not be part of the conventional general government balance sheet, but the assets and liabilities that the CBI has accumulated as a result of ELA, should be.

This would be very clear if, as we assume to be the case in Ireland, the exposure to the banks incurred by the CBI through the ELA carried a full, explicit guarantee from the Irish sovereign. The inclusion of the CBI's ELA on the Irish general government balance sheet would increase the gross general government debt by about €49bn, or 31% of GDP. In principle, net debt figures for the Irish general government would be unaffected, as the liability would be compensated by an asset of the same amount by the nature of double-entry bookkeeping. Should the valuation of the collateral and therefore the assets involved in the ELA repo-operations be above 'fair value', there is certainly a possibility that net (general government) debt figures would also increase.

If the assets and liabilities of the CBI's ELA are not general government assets and liabilities then they either are Eurosystem assets and liabilities or they are the assets and liabilities of a free-standing CBI ELA (let's call it the CBIELA) which would be a financial institution providing credit to Irish banks without a guarantee from the Irish sovereign and without any financial backing, by pooling losses or other forms of financial support, from the Eurosystem.

Can a National Central Bank Be Insolvent in the Euro Area?

ELA is large multiple of the regulatory capital of the CBI

If the ELA is 'on its own' — no government guarantee and no loss pooling with the Eurosystem, the central bank providing it is at risk of insolvency. ELA already accounts for 24% of the total assets of the CBI. Even if all the capital of the Irish Central Bank were available to absorb the losses of the CBI's ELA (which is not the case, in our view, as the Eurosystem has a prior claim on that capital), likely losses on the €49bn ELA could easily wipe out the CBI's €1.5bn capital and reserves and whatever other loss-absorbing resources the CBI has. Central bank payments default and/or balance sheet insolvency could be the result.

Wouldn't the Irish central bank be able to work its way out of a threatening insolvency trap by creating money? The CBI, like any of the NCBs of the Eurosystem, is not supposed to be able to 'print money' independently and at its own initiative, either by physically printing euro notes or minting euro coins or by electronically creating overnight deposits that will be held by eligible counterparties as bank reserves with the central bank. Base money creation is operationally decentralized, but centrally determined and controlled in the Eurosystem.

In an earlier paper we calculated, using extremely conservative assumptions, the net present discounted value (NPV) of the future currency issuance of the Eurosystem. We could not get our estimate much below €2trn, with €4trn or over a more plausible estimate.[22] Take the €2trn figure for illustrative purposes. If the CBI is entitled to use its share of the NPV of Eurosystem future seigniorage to meet the losses of the ELA, its financial situation would be a lot rosier. The CBI has about 1.6 percent of the equity of the ECB (scaled by the ratio of the ESCB to the Eurosystem). That would give it an intangible asset worth about €32bn. That ought to cover any conceivable losses on the ELA, at least if use of the facility is not further increased dramatically. However, we doubt that the ECB and the rest of the Eurosystem would agree to the CBI's future 'dividend income' from its ownership claims on the ECB to be fully or even partly used to make good the losses on what are extra-Eurosystem operations. We therefore don't consider this a realistic alternative.

Even explicit guarantee by Irish sovereign may carry little relevance if solvency of the Irish sovereign is in question itself – raising the spectre of a possible default by the Central Bank of Ireland and many questions about the implications for monetary policy in Ireland

Even if the exposure of the CBI to credit risk through the ELA is covered by an implicit or explicit guarantee of the State of Ireland, some risk of insolvency of the CBI because of its exposure to ELA remains in our view, because the solvency and liquidity of the Irish sovereign itself is not beyond doubt. That raises the spectre that, should the guarantees be called, the Irish sovereign may not be in a position to indemnify the CBI against these losses.

The implications of CBI default or insolvency for monetary policy in Ireland, and in fact the rest of the EA also, are uncertain. Would the distribution of currency and the provision of liquidity to Irish banks be taken over by the NCBs of other EA member states, or by the ECB itself? Would an insolvent CBI be allowed to continue to operate as an agent of the Eurosystem in the implementation of the ECB's monetary, liquidity and credit policy? What would happen to the CBI's equity stake in the ECB? Would its Governor be allowed to function as a member of the Governing Council of the ECB? Obviously, from a technical perspective, no NCBs are operationally or functionally required to design and

[22] See "Games of Chicken Between Monetary and Fiscal Authority: Who Will Control the Deep Pockets of the Central Bank?", *Global Economics View* , 21 July 2010, Citi.

implement the ECB's EA-wide monetary policy, but for historical legacy reasons, the NCBs are present in the Treaty and Protocols in a significant way. Could a country legally have an insolvent central bank and stay in the EMU?

Would The Eurosystem Bail Out An NCB at Risk due to ELA?

Bail-out by the ECB or other member states would undermine the very essence of EMU – single, centralised monetary policy

The alternative to NCB default, should the sovereign be unable to bail out its central bank, would be a financial rescue by the rest of the Eurosystem — a pooling of the losses, perhaps even going beyond that, if Ireland's share of the pooled losses were to exceed the CBI's capital. In that case, the now insolvent NCB would have created liquidity ('money') independently of the ECB — a challenge to the very essence of monetary union. This would be equivalent to treating the ELA as backed by the full faith and credit of the entire Eurosystem. A monetary union with multiple independent centres of money creation will end up looking like the Rouble zone that survived the collapse of the Soviet Union at the end of 1991 for a bit, until it collapsed in a series of chaotic hyperinflations.[23]

ELA also highlights continuing problems in the Irish banking system and the limitations of the IMF/EU support package

The numbers above, in our view, once again highlight the insufficiency of the Irish IMF/EU support package to put an end to the problems of the Irish sovereign and banking system. The Irish banks are still awaiting substantial restructuring. After first running out of access to private capital without a sovereign guarantee, then running out of access to private capital even with an Irish sovereign guarantee, they now seem to have run out of eligible collateral to obtain funding even from the ECB and appear to be left with few funding options. Meanwhile, the level of official financing through the Eurosystem and the ELA continues to increase and deposit flight continues unabated. ELA now accounts for 27% of total Eurosystem-plus-CBI financing of Irish financial institutions, and ELA alone now already accounts for 2.5% of the total balance sheet of the consolidated Eurosystem — already larger than the 1.6% share of the CBI in ECB capital.

The numbers also highlight, in our view, the small size of the Irish package. Even disregarding any potential fallout for the Irish sovereign from the ELA measures, the budgetary support included in the IMF/EU/EA €67.5bn program is only designed to cover the sovereign's own funding requirements for around two years. Should additional resources be required to recapitalise the CBI, the IMF/EU/EA money could be exhausted even earlier. Of course, once the remaining funds from the IMF/EU/EA facility that were explicitly earmarked for banking sector financial support (€35bn, €10bn of which have been used) are committed, it is possible that the ELA in Ireland will shrink.

We leave you with a final thought. If the Irish banks cannot borrow additional amounts from the Eurosystem using collateral issued by or guaranteed by the Irish sovereign, why are they interested in borrowing from the CBI's ELA? At best, the liabilities of the ELA are as good (in terms of credit risk) as the Irish sovereign. Are the counterparties of the Irish banks that get paid with the liquid assets provided to the Irish banks by the ELA, under the impression that these assets are Eurosystem liabilities rather than liabilities of the informal ELA subsidiary of the Central Bank of Ireland that is not part of the Eurosystem. Why does anyone accept payment in ELA liabilities? Is it because no-one can

[23] During the first half of 1992, a monetary union with 15 independent states all using the rouble existed. Independent bank credit creation led to hyperinflations in several of the Republics. Most countries had left the rouble zone or had been pushed out by July 1993. Tajikistan was the last former Soviet Republic to introduce its own currency (in 1995).

tell the difference between an ELA deposit at the CBI and a Eurosystem deposit at the CBI?

Appendix A-1

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