21 October 2014 │ 60 pages

Developed Markets
Global

Global Economics View

Stumbling Towards Banking Union

- **Narrow banking union** — We believe a single supervisor, a common resolution mechanism, including a joint recapitalisation back-up, and an effective lender of last resort – is **necessary for the euro area (EA) to survive.** The current initiatives look to introduce the basic elements of narrow banking union as needed.

- **Comprehensive Assessment (CA)** — This is a key step on the way towards banking union, and **likely satisfies the minimum conditions for success.** The range of potential remaining capital shortfalls is probably still quite large, and some surprises are likely, but we expect the revealed capital shortfalls to be filled from a mix of private and public sources, and see little risk of the CA triggering widespread financial disruption. **The CA's conclusion will likely boost EA financial conditions in coming months**. Even so, we believe the CA should have been more stringent, current backstops are still inadequate, and the CA will not eliminate divergences in financial conditions as long as national economic divergences persist, and banks are not decoupled from their national sovereigns.

- **Remaining elements of narrow banking union are also very important** — These are the Single Supervisory Mechanism (SSM) and the Single Resolution Mechanism (SRM). In particular, the **SRM and its bail-in provisions should materially reduce the likelihood that an EA sovereign will be dragged into insolvency through tax-payer-funded bank bailouts**. Reduced moral hazard will also likely lower the likelihood and severity of future banking crises. And the combination of CA, SSM and SRM are also likely to mean that the **ECB will be an effective lender of last resort** for EA banks (and sovereigns).

- **A number of risks remain** — First, the EA may replace a dysfunctional system of national supervisors with one dysfunctional pan-Eurozone supervisor and a resolution mechanism with poorly defined powers and responsibilities and complex decision-making. Second the current initiatives may not go far enough and one key fragility remains: excessive two-way links between national sovereigns and banks. Risk-weighting of sovereign debt and concentration limits on sovereign debt holdings by banks are necessary to break these links.

- **What else is needed?** — A single deposit guarantee scheme is not necessary for monetary union and requires a deeper fiscal union than the minimal common backstops required to make monetary union work. It is therefore unlikely in the foreseeable future, in our view. An EA sovereign debt restructuring mechanism (SDRM) may be necessary to handle legacy sovereign debt restructurings and possible future sovereign insolvencies, but beyond the limited mutualised fiscal backstops necessary for banking union and the SDRM, deeper fiscal union is neither necessary for EA survival nor likely, for political reasons, in the foreseeable future.

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See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

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Stumbling Towards Banking Union

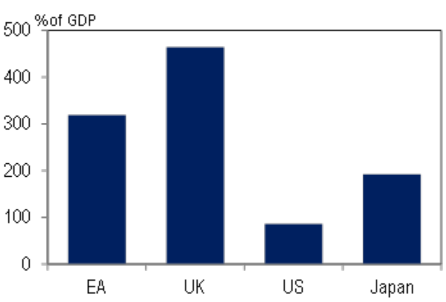
1. Introduction

The ECB's Comprehensive Assessment is in its final stages (results are to be announced on October 26). We review the Comprehensive Assessment and its implications in the context of the initiatives towards 'banking union'.[1]

Banks are extremely important for the Eurozone. They provide key supports for economic activity, as banks account for a much larger share of the funding needs of the non-financial private sector and the public sector in the Eurozone than in the UK or US. They are also the source of a number of key fragilities: the banking sector has been a major driver of the persistent divergence of financial conditions, including the nominal and real cost of household and SME borrowing across the Eurozone (one of the major centrifugal forces in the Eurozone), and the associated divergence in the effectiveness of monetary transmission (Figure 2). And tax-payer-funded bank bailouts have added to what were already high levels of public debt in many Eurozone countries (Figure 3). In Cyprus, Ireland and Spain, failed banks forced the countries into troika-funded rescue programmes for the sovereign, and in Ireland, these bank bailouts brought the sovereign to near-bankruptcy.

Banking union, if designed and implemented properly, can be an effective response to contain these risks and to create the conditions for households and firms in different Eurozone countries to have access to finance at affordable and reasonably similar rates. But the concept of banking union is poorly defined and often misinterpreted. A single bank supervisor, a common resolution mechanism for banks (including a mutualised bank recapitalisation back-up) and an effective lender of last resort for banks (and indeed, sovereigns) is what we call 'narrow banking union'. It is, in our view, necessary for the euro area to survive, by containing financial fragmentation and addressing the fragility of the Eurozone financial system.

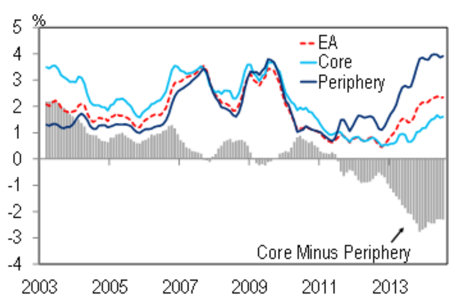
Figure 1. Selected Countries – Banking Sector Size (% of GDP), Jun 2014



Note: Monetary financial institutions (EA and UK), commercial banks (US), and domestically licensed banks (Japan).

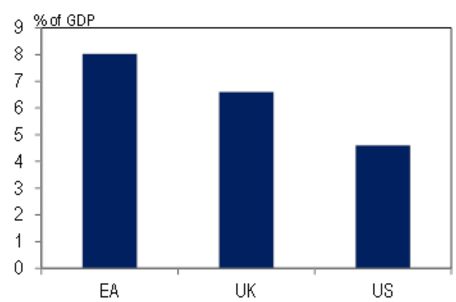
Sources: National Central Banks and Citi Research.

Figure 2. EA – Non-financial Corporations Real Cost of Borrowing (%), 2003-2014



Note: 3-month moving average. Deflated by HICP inflation. Regional aggregates computed as GDP weighted averages. Core includes Germany, France, Netherlands, Belgium, Austria, and Finland. Periphery includes Italy, Spain, Portugal, Ireland, and Greece.
Sources: ECB and Citi Research.

Figure 3. Selected Countries – Financial Sector Support (% of GDP), 2007-2013



Note: Mostly bank recapitalisations. Data cumulative since the beginning of the global financial crisis—latest available data up to Sept 2013.
Sources: ECB Financial Stability Review, IMF Fiscal Monitor, and Citi Research

[1] For previous discussions of the Comprehensive Assessment and banking union, see Euro Economics Weekly - Will the ECB's Comprehensive Assessment' of Banks be the Euro Area's TARP Moment?, Ebrahim Rahbari et al, Oct 2013, Global Economic Outlook and Strategy - Prospects for Economies and Financial Markets in 2014 and Beyond, Willem Buiter et al, Dec 2013, and Euro Economics Weekly - Why Banking Union Matters: Then and Now, Ebrahim Rahbari et al, Jul 2014.

Broad banking union – narrow banking union plus a single Rulebook (a single legal and regulatory framework for all banks in the EU) – is probably necessary for the Eurozone to prosper, and for the Single Market to flourish. A useful symbolic marker of the single Rulebook would be to require each bank supervised by the ECB to (re-) incorporate as a Societas Europaeas. On the other hand, a single deposit guarantee scheme is not necessary for monetary union. It also requires a deeper fiscal union than the minimal common backstops required to make monetary union work, and is therefore unlikely in the foreseeable future. [2]

Of course, just because something is necessary for survival does not mean that it is likely. But in our view, the currently planned initiatives towards banking union, notably the planned Single Supervisory Mechanism (SSM) and the Single Resolution Mechanism (SRM), are likely to create the basic elements of narrow banking union needed for a viable monetary union. The SSM is almost up and running and its powers and governance arrangements are as close to achieving a workable, unified bank supervisor as one could hope, given the short period of time since the concept was first mooted, and given the many legal, political and institutional constraints in the Eurozone. We remain hopeful that it will be less subject to capture by banking lobbies than its national predecessors and we are fairly confident that it will be less subject to capture by individual Eurozone governments. Should it prove no better at supervising its banks than the 18 (19 from 2015) national authorities it replaces (controlling for the degree of capture of these national authorities), that would be disappointing, but the reduction in supervisory fragmentation would by itself still be beneficial.

The SRM is at least as important as the SSM. Its setup leaves more to be desired, as it does not seem quite 'single' enough, with complex decision-making rules, a diffuse allocation of powers and responsibilities between the Single Resolution Board (SRB), the European Commission, the European Council and national supervisors, and the potential for too much political interference. But despite its shortcomings, the SRM probably achieves its key objective: the SRM and its bail-in provisions are likely to eliminate the threat that a Eurozone sovereign will be driven into default through taxpayer-funded bailouts. We hope that in time the SRM's decision-making rules will be simplified, with more weight given to an SRB that is less influenced by national governments and by national regulatory and supervisory authorities. Both for the SSM and for the SRM, it would be desirable to improve their legal bases, too (ultimately through a Treaty revision), rather than forcing them through the lowest common denominator of existing Treaties and ad-hoc intergovernmental agreements.

The move towards common institutions, including elements of common safety nets, requires stock-taking and the resolution of legacy issues. This is where the Comprehensive Assessment comes in as a major stepping stone towards banking union. It is likely to be at least a qualified success. In addition to being a technical condition for the ECB to take over as single supervisor, it is a necessary step to separate supervisory legacy issues from the ECB's track record, an opportunity to help burnish the ECB's credibility as bank supervisor, an opportunity to jumpstart the process of harmonising and improving supervision and, most importantly, yet another opportunity to finally put Eurozone banks on a stronger footing by filling the revealed capital holes. The CA appears to be perceived as reasonably rigorous (much more so than previous pan-European stress tests) and clearly has had an effect on the behaviour of banks, governments and national supervisors. The range of potential remaining capital shortfalls revealed in the CA is probably still quite

[2] Funding the mutualised deposit insurance fund through contributions from the participating banks works when bank default is idiosyncratic, not when it is systemic.

large, and some surprises are distinctly possible. But we expect the revealed capital shortfalls to be manageable enough to be filled by a mix of private and public sources, with at most limited recourse to national or mutualised fiscal back strops.[3] We see only modest risks of the CA results to trigger widespread financial disruption – and little if any chance that it would trigger systemic financial disruptions that the ECB could not handle. The CA has also weighed on bank willingness to lend over the last 12 months and the CA's conclusion will likely modestly boost financial conditions in coming months.[4] Even though we do not think that the CA has been as cathartic an experience as the US stress tests in 2009, it is no less important.

This does not meant that the CA could not have been more stringent. It could, and probably should, have been more demanding. The capacity to provide credit to corporates (including SMEs), and households of the EA banking sector that eventually emerges from the AQR and the stress tests would have been boosted if the CA had chosen more conservative assumptions for the adverse scenario of the stress test; had given less power to national authorities in the implementation of the AQR and the stress tests, and had stressed banks' sovereign exposure more. We think that subsequent tests probably will be more stringent, similar to the example of the US CCARs. A more relevant concern is that, even though very large potential capital shortfalls or an inability to fill them through a mix of private capital raisings, creditor bail-ins and publicly funded recapitalisations may be a relatively unlikely event, they could have large adverse consequences. The failure to have adequate backstops in place by the time the CA results are reported is therefore a key shortcoming. It is not, however, a shortcoming the ECB can be blamed for. It is the political authorities in the EA that have failed, once again, to step up to the plate.

It is also worth noting that the Comprehensive Assessment and the move towards banking union are significant from another perspective: they will likely increase the willingness of the ECB to act as an effective lender of last resort for banks (but perhaps – subject to additional caveats – even for sovereigns) and may boost its willingness to undertake monetary and credit easing measures more broadly. Even though the ECB has recently emphasised that there are no 'grand bargains' between it and Eurozone political leaders, there have in fact been a number of occasions where ECB measures have been contingent on actions by Eurozone governments (e.g. at the time of the ECB's Securities Markets Programme purchases and for the creation of the OMT).

The process towards banking union also brings a number of risks:

The biggest risk, in our view, is that instead of creating efficient and effective pan-Eurozone supervisors and resolution authorities that address the pre-existing distortions and future risks in the Eurozone banking system, the SSM and SRM will turn out to be dysfunctional, plagued by poorly assigned powers and responsibilities, complex and time-consuming decision-making procedures and divisive, nationally driven politics. In our view, of the two main mechanisms, the SRM is more at risk of dysfunction, as its decision-making procedures are even more complex than for the SSM. In addition, through the involvement of the European Council, its decision processes are subject to political interference and delays, despite the obvious fact that timeliness and speed are even more important in resolution than in supervision.

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[3] See Stress Test: To Believe, or Not Believe and Banking on Europe - The Class of 2014: Stress Tests & Beyond, Kinner Lakhani et al, Sep 2014, Citi Research.

[4] See Banking Union = Further margin support - European Banks – Funding Weekly, Kinner Lakhani et al, October 2014, Citi Research.

Another risk is that the current initiatives simply do not go far enough in raising supervisory standards and applying the new bail-in powers in a timely and efficient manner. Since mid-2012, progress towards banking union has repeatedly been impeded both by the lack of market pressure, and by political paralysis created by Germany's parliamentary elections and the European Parliament elections. Incomplete banking union can damage the credibility of the project and would almost certainly cause it to fall short of its objectives.

Another key fragility that remains mostly unaddressed is the excessive two-way links (aka nefarious feedback loops) between EA national sovereigns and banks in their jurisdictions. In our view, the route to loosening this link is through a mix of enhanced cross-border banking (including cross-border mergers), the Europeanisation of financial repression[5], ending regulatory subsidies for sovereign exposure and potential debt restructuring for Eurozone sovereigns, by risk-weighting sovereign debt and applying concentration limits to the exposure of any EA bank to any EA sovereign. Even though some progress along these lines is likely in coming years, we are not holding our breath.

And even a successful comprehensive assessment and banking union is no panacea for the Eurozone. The more or less successful conclusion of the CA should in due course eliminate one source of uncertainty for banks, and might, along with the ECB's recently announced TLTROs and private asset purchase programmes, encourage them to lend a bit more to the non-financial private sector. But even a successful CA and achievement of narrow banking union is unlikely to eliminate financial divergences in the Eurozone. This is because these are in part driven by persistent economic divergences, which are driven by high public and/or private debt in some countries, still-poor competitiveness, and political uncertainty. Some of this divergence in financial conditions is appropriate: if ultimate borrowers in country A are riskier than ultimate borrowers in country B, even if they could both borrow freely from both country A and country B banks, these differences ought to be reflected in the cost of borrowing. But if country A ultimate borrowers pay more borrowing from country A banks than country B borrowers pay for borrowing from country B banks, either because the value of the ultimate back-stop provided to national banks by national sovereigns differs between country A and country B, or because, even with comparable national sovereign backstops, the creditworthiness of country A banks differs from that of country B banks and borrowers cannot arbitrage freely between banks in both country A and country B, then banking union is (at least) a partial failure.

The Eurozone banking sector itself is also still in need of deep restructuring, as there are too many banks in the Eurozone (notably Germany), as Eurozone banks are on average too small and too unprofitable to support growth. For example, the IMF's recent Global Financial Stability Report noted that Eurozone banks are not profitable enough to support sustainable growth in lending (even if the demand for credit were to pick up materially), and much more so than banks in other parts of the world.[6]

[5] Instead of forcing country X's banks to absorb country X's sovereign debt at yields well below that which they would accept voluntarily, the ECB would (discretely) force all EA banks to absorb country X's sovereign debt at yields well below what they would accept voluntarily, according to some distrubutioal key like the EA member states' capital key's in the ECB. See Willem H. Buiter (2012). "Three unintended consequences of banking union," Citi Research, Economics, Europe, Global Economics View, August 2, 2012.

[6] See IMF (2014), "Global Financial Stability Report: Risk Taking, Liquidity, and Shadow Banking", October 2014, https://www.imf.org/external/pubs/ft/gfsr/2014/02/pdf/text.pdf

We believe narrow banking union is necessary, but that this alone is not sufficient for Eurozone survival. Orderly joint restructuring of sovereign and bank debt may be required in some cases. A sovereign debt restructuring mechanism (SDRM) permitting the orderly restructuring of insolvent euro area sovereigns is probably necessary to handle legacy sovereign debt restructurings as well as future, and as yet unforeseen, sovereign insolvencies. Without an SDRM capable of resolving sovereign insolvencies, large and small, in an orderly manner, the banking union we hope and expect to see emerge in the EA might not be enough to prevent an eventual Eurozone breakup. The only credible alternative, a mutualisation of sovereign debt and/or sovereign deficits in the EA or, effectively, a major step towards a federal fiscal Europe, does not look politically feasible today or in the foreseeable future.

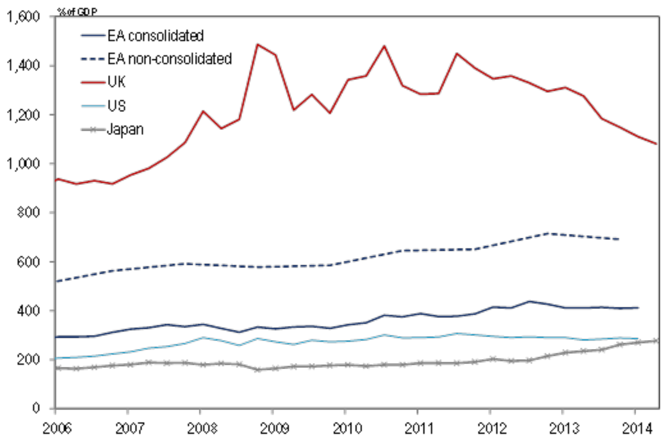
2. Why does the euro area need banking union?

Finance is fickle and prone to excess. Because it is essentially trade in promises, it scales up very rapidly when there is confidence, optimism and trust. It scales down even more rapidly, leaving a trail of defaults and insolvencies in its wake, when fear, pessimism and mistrust take over. In its interaction with the real economy, finance can be a very powerful but potentially also destructive force. Financial regulation is therefore necessary – unavoidable even – and highly important for effective and efficient financial intermediation. Financial integration between nations will generally require some measure of common oversight and common response tools, and the more integrated finance is across countries, the greater the degree of common regulation and intervention that is appropriate, and indeed necessary, for financial stability.

The need for common financial regulation, supervision and intervention is greatest in a monetary union, of which the euro area is the most prominent and globally systemically important example. The rationales for a common framework in a monetary union are financial stability, efficiency of financial intermediation and the effective and uniform transmission of monetary policy throughout all member states of the monetary union. These aims demand that the creditworthiness of a national sovereign be decoupled from the creditworthiness of the banks in its jurisdiction. Only then can there be a level playing field for banks in the monetary union. Only then can the perverse feedback loops between weak banks and weak sovereigns be avoided. Only then can we have sufficient competition between banks in each member state and achieve economies of scale and scope without having too much banking and/or too many banks in the monetary union. Only then can we avoid the financial fragmentation and segmentation that prevent the single monetary policy from being transmitted evenly across all member states in the monetary union.

Financial fragmentation and segmentation can be exacerbated by high capital mobility between the monetary union and the rest of the world. Cross-border capital mobility is much higher in the Eurozone than in the US or Japan. For instance, financial openness (the consolidated sum of gross external financial assets and liabilities, netting out intra-EA assets and liabilities) of the euro area amounts to roughly 400% of GDP, more than double than in the US or in Japan (Figure 4). For individual EA countries (or including intra-EA assets and liabilities), financial openness can be even larger still (Figure 5).

Figure 4. Selected Countries – International Financial Openness (% of GDP), 2006-2013



Note: Sum of gross external financial assets and liabilities.
Sources: IMF, BEA, BoJ, ONS, and Citi Research

Figure 5. Selected Countries – International Investment Position (% of GDP), Dec 2013

	Gross Int. Assets	Gross Int. Liabilities	Net Int. Assets
EA	198.6	211.1	-12.5
Austria	266.8	264.0	2.8
Belgium	465.3	422.0	43.3
Finland	341.4	326.0	15.3
France	285.1	302.5	-17.3
Germany	254.4	205.9	48.5
Greece	123.8	244.6	-120.9
Italy	129.6	160.0	-30.3
Ireland	1,624.2	1,791.7	-1,67.5
Netherlands	502.2	456.3	45.9
Portugal	178.5	299.2	-120.7
Spain	136.1	235.9	-99.8
Denmark	274.1	234.4	39.7
Sweden	295.3	300.8	-5.5
UK	566.6	582.2	-15.6
Norway	270.0	170.0	99.9
Japan	165.0	96.9	68.1
US	130.7	157.9	-27.2
Canada	155.1	153.6	1.5

Note: Values for Norway correspond to Dec-12.
Sources: IMF, BEA, BoJ, Statistisk Sentralbyra, and Citi Research

The rationale above applies to 'financial union', i.e. the need for common financial regulation, supervision and remediation, and ideally a common legal framework, not just for banks (and certainly for all highly leveraged entities with a high degree of asset-liability mismatch as regards duration, liquidity, credit risk and other relevant characteristics). But banks are a disproportionately important part of the financial system in the euro area – hence the emphasis on 'banking union' rather than 'financial union'.

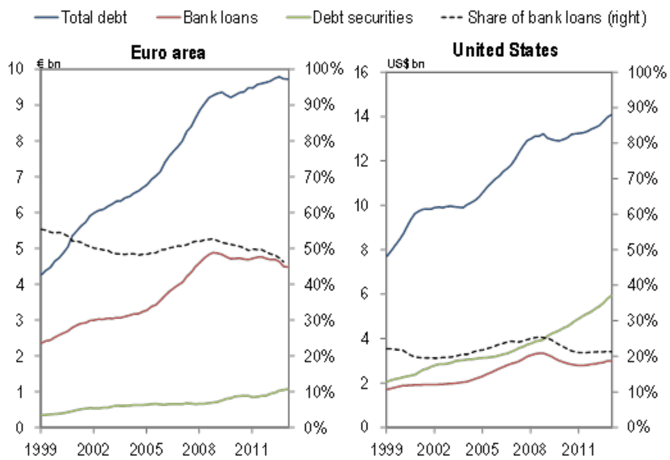
2.1 The importance of banks in the Eurozone

It is by now well known that Eurozone households and businesses rely more on bank loans than their counterparts in other countries. An ECB study showed that in 2013 loans on the balance sheet of banks accounted for 47% of NFC debt in the euro area against 21% in the US (Figure 6). The same report showed that banks are relatively even more important for lending to *households* in the euro area, with bank loans accounting for 85% of total household gross debt (Figure 7).[7] In the US, where specialised non-bank lenders are more prominent, banks only account for 28% of credit to households. Eurozone flow of funds data also show that non-financial corporations (NFCs) in the euro area both have more debt and more loans as shares of total liabilities than NFCs in the US, the UK, Japan, and also the Scandinavian countries (Figure 8), even though not all of these loans are from banks (in fact only roughly 50% are, with the remainder loans by other businesses or non-bank financial companies). [8]

[7] In the publication, the ECB defined HH debt as loans only. According to FoF data, 10% of HH liabilities are unpaid bills (accounts payable), implying that bank loans account for 77.1% of HH liabilities including liabilities other than loans.

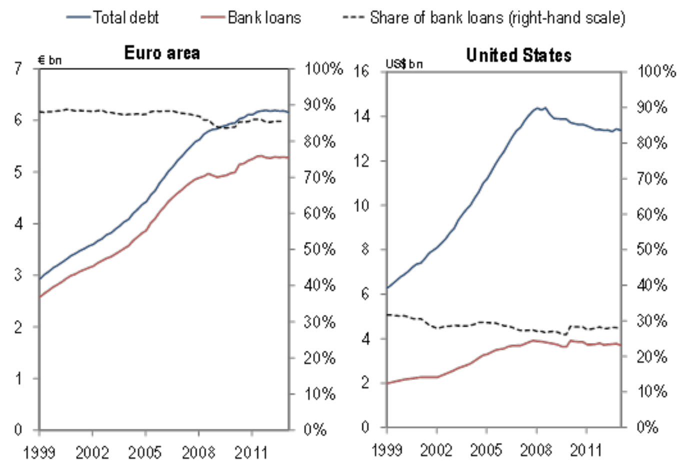
[8] There are a number of potential issues with the Flow of Funds (FoF) data on the composition of liabilities. For example, these data suggest that loans by other companies account for 28% of total

Figure 6. Selected Countries – Non-financial Corporation Gross Debt (bn LCY), 1999-2013



Note: Total debt includes loans, securities and insurance technical reserves. For the EA bank loans are monetary financial institutions lending taken from flow of funds. For the US, data is taken from banks balance sheet.
Source: ECB, FED, and Citi Research

Figure 7. Selected Countries – Household Gross Debt (bn LCY), 1999-2013

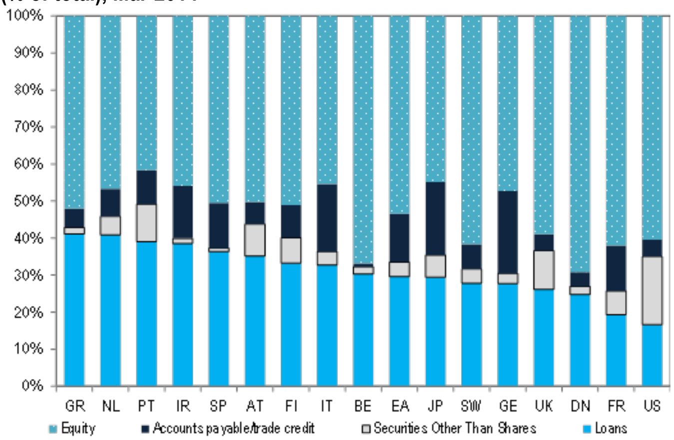


Note: Total debt includes loans only. For the EA bank loans are monetary financial institutions lending taken from flow of funds. For the US, data is taken from banks balance sheet.
Source: ECB, FED, and Citi Research

There are notable differences in the extent of reliance of Eurozone firms and households on bank finance. For instance, NFCs in France or Portugal fund themselves much more through debt issuance in capital markets than firms in Greece, Italy or Spain, but even in France or Portugal the reliance on capital markets is much smaller than in the UK or the US (though it is higher than in Japan). And it is true that the share of loans in total NFC funding and the share of bank loans in total loans (Figure 9) are gently declining, mostly compensated by an increase in lending by other financial intermediaries, other NFCs and increasing bond issuance. Market debt issuance (bonds & bills) by NFCs in the EA has gone up fairly substantially recently (at a rate of 9% pa since 2009), and for virtually all EA countries in recent years (except perhaps Greece and Slovakia), but from a low base. Securities debt accounted for 2.9% of total NFC liabilities in 2008, and still stood just at 4% at Q1-2014. The share of bonds in NFC debt actually went up *less* in the EA than in the US or UK over the same period.

NFC loans in the EA excluding accounts payable/trade credit – a number which seems rather high. Since the data are unconsolidated, these data probably reflect large amounts of intracompany loans. In addition, for the unconsolidated FoF data, it seems plausible that e.g. if an Italian NFC issues bonds through a subsidiary in the Netherlands and passes on the funding raised to the mother company, the FoF statistics at the EA level would register both an NFC (intracompany) loan liability to the Italian entity and a debt securities liability for the NL affiliate.

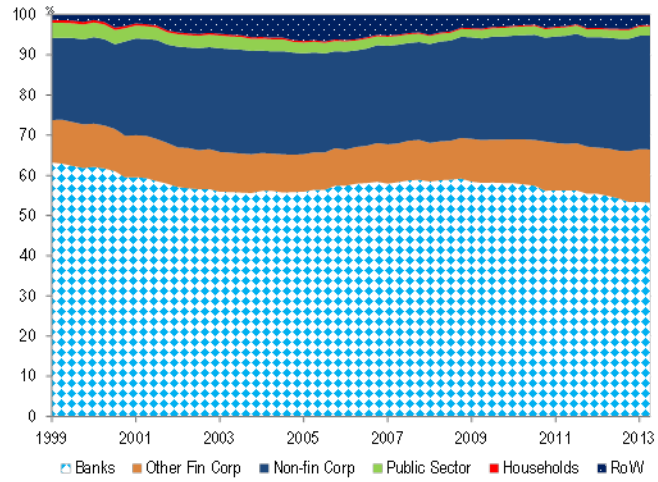
Figure 8. Selected Countries – Non-Financial Corporations Liabilities (% of total), Mar-2014



Note: Values are on a non-consolidated basis except for Portugal

Sources: National Sources and Citi Research

Figure 9. Euro Area – Non-financial Corporation Loans Outstanding (% of total), 1999-2013



Note: Other financial corporations include insurance corporations, pension funds, and other financial intermediaries. RoW (rest of the world) here refers to non-euro area creditors.

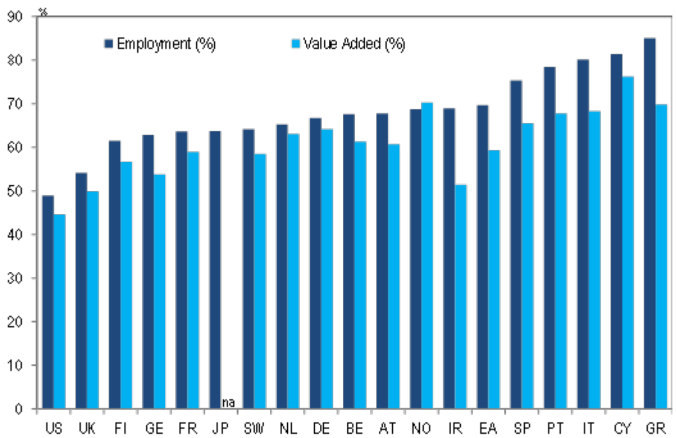
Sources: ECB and Citi Research

Banks in the EA thus remain very important for financing businesses and more so than banks in other countries. The importance of banks for the Eurozone is in part due to the fact that SMEs everywhere are disproportionately reliant on bank funding and that the Eurozone economy is more reliant on SMEs than other economies. SMEs in the euro area account for almost 70% of employment and almost 60% of value-added, much more than in the UK or US (see Figure 10). In Spain, Portugal, Italy, Cyprus or Greece, SMEs play a particularly large role. In the latest (April 2014) ECB survey on access to finance of SMEs (SAFE) 94% of SMEs responded that debt securities were not relevant for them as a source of funding (vs 84% for large companies, defined as having more than 250 employees). Although new developments in 'crowd funding', and regulatory and legal changes to reduce the massive overhead costs (legal, compliance etc.) associated with the issuance of financial instruments may enhance SME access to the financial markets, banks are likely to remain the dominant source of external funding for SMEs.

Despite efforts to diversify the funding sources of EA firms and households, fixing the banking sector will remain essential for the current incipient recovery to gain strength and indeed for the foreseeable future.[9] The importance of the banking sector in the euro area is also reflected by a fairly close link between changes in bank lending standards and measures of activity, such as GDP or investment (Figure 11). That relationship appears to have loosened recently, however, which could be interpreted as evidence that banks are becoming less important or simply as a reflection of the exceptional dysfunctionality of the credit situation in the euro area currently.

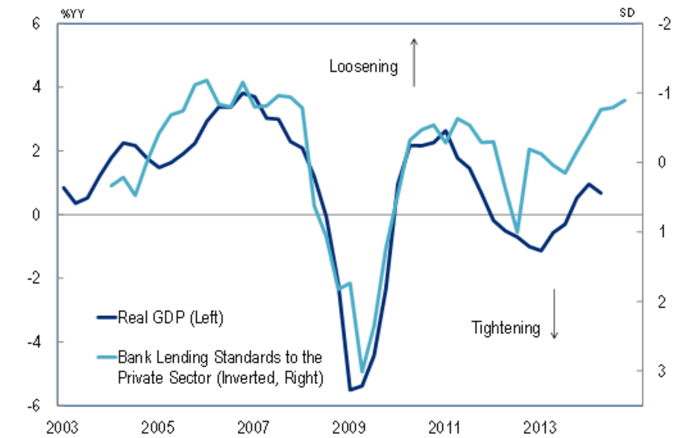
[9] Various national and European initiatives to support the diversification of market-based sources of funding for firms have been introduced in recent years. For example, the Spanish government introduced a corporate-bond exchange (the Fixed-Income Alternative Market) for SMEs in October 2013 (http://online.wsj.com/news/articles/SB10001424052702304171804579121311015365286). Following the EU 'Action Plan' to improve access to finance for SMEs and subsequent initiatives, the EU has allocated €3bn over 7 years towards instruments to support SME funding (http://ec.europa.eu/enterprise/policies/finance/index_en.htm). The first such funds were allocated in July 2014 (http://ec.europa.eu/enterprise/newsroom/cf/itemdetail.cfm?item_id=7677&lang=en&tpa_id=127&title=155-small-firms-to-receive-funding-in-first-wave-of-grants-under-EU-SME-Instrument)

Figure 10. Selected Countries – Share of SMEs in Employment and Value Added (% of total), 2013



Note: SMEs are small- and medium-sized enterprises and are defined as firms with less than 250 employees. Data for the US is for 2011 and for firms with less than 500 employees. For Japan, SMEs are defined as firms with capital between JPY10m to JPY100m, data corresponds to 2012.
Sources: Census Bureau, European Commission, Ministry of Finance of Japan, and Citi Research

Figure 11. Euro Area – Bank Lending Standards to the Private Sector (2Q Lead, SD from mean) and Real GDP (%YY), 2003- Q3 2014



Note: Lending standards to the private sector calculated as a weighted average (by loans outstanding) of lending standards to loans to non-financial business, mortgage lending and consumer credit. BLS corresponds to average of the actual and expected series.
Sources: Eurostat, ECB, and Citi Research

3. The main elements of banking union

The main elements of banking union are:

3.1 A single, common recovery, recapitalisation and resolution mechanism for undercapitalized banks, including a single resolution authority, and common resolution and recapitalisation funds.

This includes elements of a safety net and elements of control. National recapitalisation and resolution arrangements may not be able to take the required remedial action (as they may lack the expertise, data or resources). It may be inefficient for them to do so (particularly for cross-border institutions). And reliance on national mechanisms would almost certainly be an impediment to a single market and effective cross-border competition by banks. The ability to resolve institutions efficiently and to bail in unsecured creditors should presumably also increase the likelihood that unsecured creditors will be bailed in rather than tax payers. This will create better incentives for managers and investors to prevent the buildup of financial risks. Key for an effective resolution mechanism is that it can take decisions quickly (ideally at most over a weekend). It is also important for its rules to be transparent, so that bank investors and depositors can make informed investment decisions.

3.2 A single bank supervisor

The main purpose for having a single, common-supervisory regime is to provide the control element to go along with the common insurance element that a common lender of last resort and common recapitalisation and resolution funds (and potentially a common deposit insurance regime) provide. A single supervisor is also clearly central in levelling the European playing field and could make the euro area financial sector ultimately more attractive for savers and investors by harmonising standards. The hope (maybe the expectation) is that a single supervisory regime would also be able to raise supervisory standards, including by reducing the scope for 'regulatory capture' by firms and by resisting unwarranted intervention by national governments. The EU-EEA principle of mutual recognition and the single passport principle, which allows financial services operators legally established in one Member State to establish/provide their services in the other Member States without further authorisation requirements, has had some disastrous consequences, as demonstrated by the Icesave calamity. These principles, under which a branch located in country A (the host country) of a bank domiciled in country B (the home country) is supervised by country B's supervisor (the home country principle) are far from ideal. Free movement, mutual recognition and the home country principle may work for certain industries and professions but in banking and finance it is an accident waiting to happen.

3.3 A single rule book, that is, a single legal and regulatory framework for all EA (or EU) banks.

Unless the EA moves quickly to bring all EA banks under a common legal and regulatory framework (re-incorporated as Societas Europaea, for instance), it could find itself in 2015 with a single supervisor supervising banks operating under 19 different laws and regulatory regimes. This would be inefficient and costly, with unbounded scope for regulatory arbitrage, and would prevent the growth of cross-border banking and the associated highly desirable increase in competition in the EA banking sector.

3.4 A single, effective lender of last resort and market maker of last resort.

An effective lender of last resort is crucial in any financially developed economy, but is often left out in discussions of 'banking union'. It may be even more important in the Eurozone with its deeply imperfect and incomplete institutional environment. The overriding purpose of the lender of last resort would be to provide potentially unlimited funding liquidity to solvent, but potentially illiquid institutions; its counterpart for the provision of market liquidity to systemically important financial markets that have become dysfunctional because of fear, distrust and rampant pessimism is the market maker of last resort. The MMLR helps nip market panics in the bud and thus reduces the risk of such panics coming into being in the first place. The availability of an effective lender of last resort and market maker of last resort is the only truly crucial insurance element in a banking union – far more important than common deposit insurance or common recapitalization facilities, in our view. The ECB/Eurosystem is the only conceivable lender of last resort and market maker of last resort for the EA.

3.5 A single, common deposit insurance.

This is the common safety net on the deposit side. There are two potential benefits from deposit insurance. It can support financial stability by reducing the incentives of depositors to withdraw their funds before others do at the sign of any trouble, or indeed without any sign of trouble, motivated solely by self-validating fear of being too late in withdrawing one's deposit. Deposit insurance can also provide some 'widow and orphan protection', i.e. provide protection for unsophisticated investors for whom it makes no sense to monitor the health of the banks with regard to their savings.

The first benefit of deposit insurance is sometimes overplayed. In principle, a working lender of last resort could *ex-post* make good any liquidity shortfall a bank suffers from a deposit run and thereby prevent the potential for bank runs to bankrupt solvent institutions. In principle, having the lender of last resort compensate ex-post may at times be more costly than providing deposit insurance ex-ante, if it is less transparent to depositors and therefore less effective in preventing panics. This effect may well be more true in the future, when (potentially 'risk-based') deposit insurance will be coupled with adequate resolution powers to bail in unsecured creditors, including some depositors, in failing banks, than in the past. But in the past, providing deposit insurance was probably often still socially costly as it creates moral hazard by implicitly subsidising excessive risk-taking by banks and their investors. Having a single supervisor and a more robust resolution and recapitalization framework could also make it easier for the ECB to be proactive and efficient as a true lender of last resort and market maker of last resort, reducing the need for deposit insurance for financial stability purposes.

But once you accept the merit of providing deposit insurance for financial stability reasons, there would also be a rationale for *common* deposit insurance in the euro area. An individual EA country may be too small to stem a deposit run (so individual countries may not be *able* to provide this insurance), and there could be contagion to other countries which may be more severe in a currency union (implying that it would be inefficient for a country to bear the full cost of providing deposit insurance at home and not to contribute to the cost of deposit insurance in other member states of the monetary union). In addition, if the insurance fund is ultimately linked to and backed by the state (as it inevitably is, even if the banking industry itself contributes to a mutual insurance fund, when a banking crisis is systemic rather than idiosyncratic), the insurance that a bank in a country receives will depend on the creditworthiness of the sovereign, leaving the playing field for banks across various EA countries potentially uneven.

There is a fairly broad consensus about the five major components of broad banking union (or at least four of the five, as the lender of last resort is regrettably often left out of the discussion), even though there is much disagreement about the details. There is, even less agreement on how to get there.

But not all components of banking union are equally important. A necessary condition for a currency union to survive is a lender of last resort for illiquid sovereigns and national banking systems – the equivalent of an adequate (in principle potentially unlimited) amount of foreign exchange reserves in a multi-currency system. In the euro area, this is provided through access to the Eurosystem funding facilities and the Target2 system which allows individual national central banks (NCBs) to borrow from it (and through it from other NCBs in the Eurosystem) when they face liquidity outflows.

In the event, the Eurosystem balance sheet and Target2 imbalances were allowed to rise substantially during the Great Financial Crisis (GFC). In the periphery, the re-liquified banks bailed out their sovereigns through purchases of domestic sovereign debt on terms and in quantities that reflected financial repression. But in our view, the continued open-ended liquidity insurance is unsustainable as long as the solvency of a significant part of the Eurozone banking system is in question. The necessary dimensions of banking union thus are those required to sustain the liquidity insurance function without turning the Eurosystem into a back-door, open-ended and uncapped source of quasi-fiscal transfers. In our view, these key dimensions are i) a common supervisor, ii) a common resolution and recapitalisation authority and fund.

A common supervisor is required to ensure that supervisors do their job and are not 'captured' by local banks and national governments. The common resolution and recapitalisation facility is necessary to correct potential weaknesses that the supervisor may find. On the latter, most of the heavy lifting should be expected to be done by the common resolution facility. Bailing in unsecured creditors efficiently should usually suffice to avoid the need for the use of common recapitalization funds. But there may be special cases where bail-inable liabilities may fall short of the overall capital need of a systemically important bank or the use of public money may otherwise be economically or financially (and not just politically) expedient.

Common deposit insurance and a 'single rule book' are not necessary for the Eurozone to survive in our view, although they are desirable. In particular, deposit insurance is usually not necessary for financial stability in the presence of a properly functioning lender of last resort that can compensate for liquidity outflows during potential bank runs. Credible deposit insurance can be useful in limiting bank runs and as a tool for social protection for small depositors, but would not make a contribution to financial stability that cannot be provided by other means. In any, case, common deposit insurance requires a deeper fiscal union than the minimal common backstops required to make monetary union work and is therefore unlikely in the foreseeable future for political reasons. Ex-ante and ex-post cross-border burden sharing are deeply unpopular throughout the euro area.

In the presence of potential government insolvency, a common supervisor and resolution authority and fund would be a necessary but probably not a sufficient condition for the Eurozone to survive. In some periphery countries, high and rising public debt levels create a material risk of potential government defaults in the future. Orderly joint restructuring of sovereign and bank debt may be required in some cases. A sovereign debt restructuring mechanism (SDRM) for the EA, with statutory powers to supplement support market-based or contractual arrangements (including collective action clauses and creditor committees), may be necessary to handle legacy sovereign debt restructurings as well as future and as yet unforeseen sovereign insolvencies. But given the large inherited exposure of EA banks to domestic governments, orderly sovereign debt restructuring may be impossible without common resolution and recovery facilities for banks.

4. The objectives of banking union

Banking union has three (related) aims, and a fourth ‘unofficial’ one. First (and foremost), to reduce the fragility of the Eurozone, including EA-wide mutual insurance/risk sharing and a safety net for systemically important institutions, to achieve greater control over banking intermediation through uniform EA-wide regulation/supervision and sharpened incentives for creditors/lenders and debtors/borrowers alike that align social and private costs and returns, and ensure that the insurance and risk sharing provided do not lead to moral hazard or unwarranted redistribution of losses. Second, to ensure access to appropriately priced credit for Eurozone households and corporates, which will likely require an increase in cross-border competition in the banking sector, while reducing the number of banks. Third, to contain and reduce financial fragmentation across Eurozone countries, including a level playing field as regards access to funding, saving and investment opportunities for households and non-financial corporates – as independent as possible of the creditworthiness of the national sovereign. Finally, the fourth, unofficial objective of banking union is to create the conditions for the ECB to play its role as an effective lender of last resort and market maker of last resort.

4.1 Reducing the fragility of the Eurozone financial system[10]

To increase financial stability is perhaps the key objective of banking union and it is a defensive one: to prevent systemic banking crises. To achieve this goal, two ‘legs’ are required: first, establishing high standards of financial regulation and supervision to prevent the buildup of risks and vulnerabilities in the EA financial system. Second, creating the tools and instruments to contain and mitigate the damage when such risks manifest themselves in the form of financial instability and crises. The size of the EA banking system (e.g. relative to GDP) and its importance for funding the EA private sector means that the importance of banking system stability is even higher than in other economies.

Both the preventive and the palliative legs of supporting financial stability are very important. The aftermath of the global financial crisis laid bare the extent of regulatory and supervisory inadequacies across the Eurozone, which often went dismissed of glossed over with the bromide ‘our country or financial system is different’. However, even if the Eurozone manages to substantially raise regulatory and supervisory standards, chances are that the financial system will periodically be subjected to stress episodes. Raising the resilience of the financial system to such stress episodes, including by raising capital requirements, tightening liquidity rules, applying the same risk weightings to private and sovereign debt instruments, and defining and enforcing concentration and exposure limits for all kinds of exposures, will be essential. In addition, institutions and mechanisms to allow policy makers to manage, contain and resolve crises (and therefore usually banks) are going to be crucial. Unlike the US, where the FDIC regularly resolves at least smaller banks so efficiently that it often goes unnoticed except locally, and usually without any need for taxpayer support (almost 500 banks have been resolved by the FDIC since 2008), the Eurozone has long lacked the political willingness and the institutions to resolve even non-viable banks. Usually, failing banks have been bailed out at substantial expense to the taxpayer.

[10] Of course, shadow banks and non-banks can play major roles for financial (in)stability. That is an important topic in itself, but in this study we focus on banks.

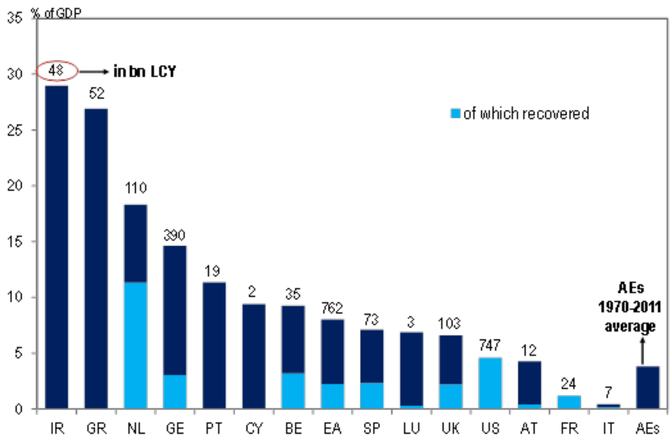
Which brings us to the next point. One key source of financial fragility in the Eurozone is the so-called 'sovereign-bank loop': the exposure of the taxpayer to idiosyncratic and systemic bank failures and the direct exposure of individual banks or the system to the financial health of the state. The latter often results from financial repression (sometimes in the guise of prudential regulation) forcing banks to hold more domestic sovereign debt than they would voluntarily at the yields on offer. This is further encouraged by the zero risk weighting applied to 'own' sovereign debt – a practice without any economic justification, given that two euro area sovereigns have already defaulted on their debt and that a number of other EA sovereigns remain at high and sometimes rising risk of default. Figure 12 shows that the outright gross fiscal support (capital injections by governments) alone provided from 2007 to 2013 by selective euro area countries has exceeded €760bn (8% of EA GDP). In at least seven countries, the costs to date have already exceeded the average fiscal cost of financial crises in advanced economies over the past 41 years (which Laeven and Valencia (2012) estimated at 6% of GDP).[11] In Ireland, the cost of bailing out the banks came close to bankrupting the government. The figure also shows that the fiscal impact was not at all limited to periphery countries. In fact, by far the largest absolute amount of fiscal support for banks has been provided in Germany (which ranked fourth as regards fiscal support as share of GDP).

In addition to the direct fiscal outlays, EA countries provided quasi-fiscal support through e.g. government guarantees for deposits or other types of bank funding and through funding at concessionary rates through both the regular Eurosystem facilities and emergency liquidity assistance (ELA) provided by national central banks under State guarantees. To our knowledge, no good data sources are available to track the scope of such support, but it has certainly been large.

But when it comes to the relationship between banks and governments in the euro area, it's a case of 'you scratch my back and I scratch yours'. Over much of the period since the introduction of the euro, the exposure of banks in the EA to their domestic governments (relative to the size of their balance sheets) had fallen (Figure 13), just as it had in many other advanced economies as banks globalised their investments. That trend was arrested and in a number of countries sharply reversed in recent years, even though in most countries the level of domestic government exposure is still substantially below its level at the time of EMU creation. For the euro area as whole, MFI exposure to EA governments stood at €2.9trn (9.4% of total assets), of which more than two thirds are holdings of euro area government securities (rather than loans, see Figure 14). That is roughly €900bn (2.4pp of assets) more than in mid-2007, but still lower relative to total assets than in 1998 (when it stood at 14%) and the share was probably even higher before that.

[11] Laeven, L and F Valencia (2014), "Systemic Banking Crises Database: An Update", IMF Working Paper June 2012

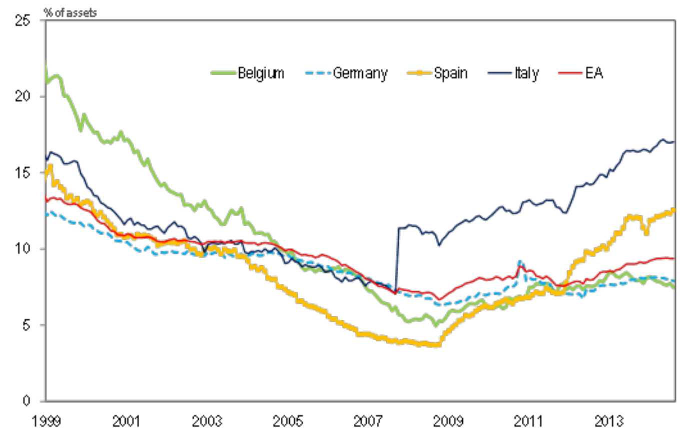
Figure 12. Selected Countries – Financial Sector Support (% of GDP), 2007-2013



Note: LCY is local currency. Data correspond to fiscal outlays of the central government, except for Germany and Belgium, for which financial sector support by subnational governments is also included. Data are cumulative since the beginning of the global financial crisis—latest available data up to August 2013. Data do not include forthcoming support. Average financial sector support for advanced economies (AEs) in 1970-2011 taken from Laeven and Valencia (2012).

Source: IMF Fiscal Monitor and Citi Research.

Figure 13. Selected Countries – Monetary Financial Institutions Holdings of General Government Gross Debt (% assets), 1999-Aug 2014



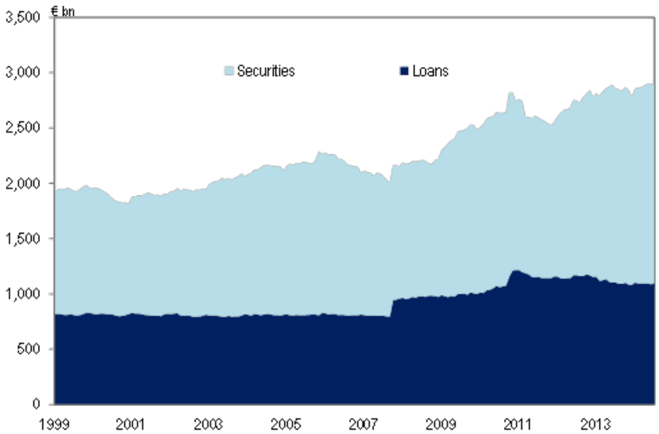
Note: Holdings of general government gross debt includes loans and securities. Jump in Italian series in Oct 2007 follows a reclassification of CassaDepositi e Prestiti s.p.a. from "other financial institutions" to "other MFIs".

Source: ECB and Citi Research

The increase in bank exposure to domestic governments was by no means uniform. The biggest increases in government exposures (relative to assets) took place in Italy (increasing by 9.9pp of assets from the trough in 2007), Slovakia (8.7pp), Spain (8.5pp), and Portugal (5.8pp). These are also the countries where exposure to the domestic government (relative to balance sheet size) is highest currently. Relative to capital the scale of the exposure of banks to the domestic government and its increase in recent years are even higher, even though the ranking of countries by exposure is different according to this metric. For instance, relatively low-capitalised Belgian and German banks have among the highest ratios of domestic government exposure to capital.

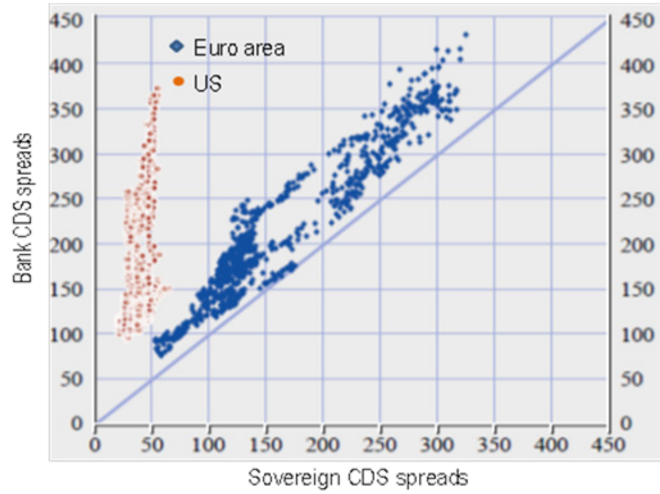
The average exposure to domestic governments of EA banks (as a share of assets) is higher than in Denmark, Sweden or Canada, and a little higher than in the UK. But is worth noting that despite the increases, it is in fact still lower than for commercial banks in the US and much lower than in Japan and the increase in exposure was also larger in Japan or the US. Thus, it appears that countries where public debt rose fast often saw the government exposure of their banks rise rapidly, not just in the euro area. In Italy, Spain and Portugal, the share of ownership of public debt by domestic banks in fact rose markedly, as banks took up most of the net issuance in recent years (in Italy by almost 20pp and in around 10pp in Portugal and Spain). An interesting case is Portugal, where public debt ownership by domestic banks rose (from a relatively low base), despite the fact that its troika programme meant that the government's net funding needs in markets have been essentially zero except for bills in recent years. Overall, however, as public debt increased very fast in the euro area, the absolute increase in public debt exposure of banks has not always translated into a bigger share of ownership of public debt by banks.

Figure 14. EA – Monetary Financial Institutions Holdings of EA General Government Gross Debt (€ bn), 1999-Aug 2014



Sources: ECB and Citi Research

Figure 15. Selected Countries – Sovereign and Bank CDS Spreads (basis points), 2010 - Sep 2013



Note: Average CDS spreads for EA and US large and complex banking groups (LCBGs) and countries where LCBGs are located (Belgium, France, Germany, Italy, Spain and the Netherlands).

Sources: ECB and Citi Research

Nevertheless, the high amount of Eurozone banks' sovereign exposure means that banks are often hostage to the markets' assessments of the solvency of these sovereigns (and the prices of government bonds generally). The fate of banks and sovereigns and the prices of bank and sovereign securities have therefore become closely intertwined in the Eurozone, where they were not so before the crisis and are not in, say, the US today (Figure 15). In Section 7, we discuss ways to reduce bank-sovereign linkages.

4.2 Boosting access to appropriately priced credit for households and non-financial corporates

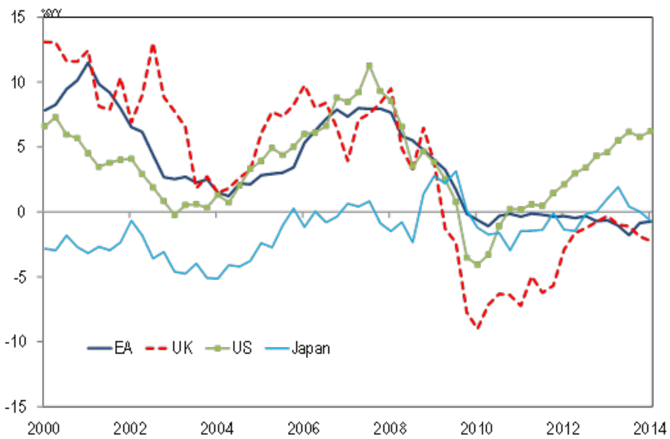
As noted above, banks remain very important sources of credit to firms and households in the euro area, so repairing their ability to provide credit is key. Well-capitalised banks should be in a better position to lend, and well-regulated, competitive banks should compete effectively while reaping economies of scale and scope across the region. Thus, increasing levels of capital for banks may help to achieve both of the first two aims of banking union.

However, it is conceivable that some of the actions taken to make the financial system more resilient (such as higher capital ratios, risk weights and liquidity requirements, and especially restrictions on permissible funding, investment and trading activities) may also raise the cost of capital of banks in general or for certain types of activities (notably lending) or could otherwise constrain banks' ability or willingness to lend, at least during the transition period until the 'new steady state' is reached. Even those who accept the logic of Modigliani-Miller and recognise that holding more capital reduces the cost of debt funding will acknowledge the limits of applicability of the strongest version of the Modigliani-Miller theorem, that the average cost of funding is independent of the shares of equity and debt in the funding structure. Deductibility of debt interest (but not of dividends) from the corporate tax base is one obvious reason why higher capital requirements raise the average cost of funding.

There is indeed *some* evidence that bank lending conditions (in terms of lending volumes, credit standards or lending rates) remain relatively weak even for the euro area average, compared to other major advanced economies, but the evidence is not too damning.

Both household debt and the debt of non-financial corporations have been falling recently in the euro area in real terms – by around 0.5%YY in Q1 (Figure 16).[12] But in the UK (for both HHs and NFCs) and for households in the US, total growth in real debt has been rather similar.[13] *Bank* lending in the euro area has been weaker than this, particularly for NFCs, where it has recently been falling by around 2%YY in nominal terms, even though the rate of contraction is moderating.[14]

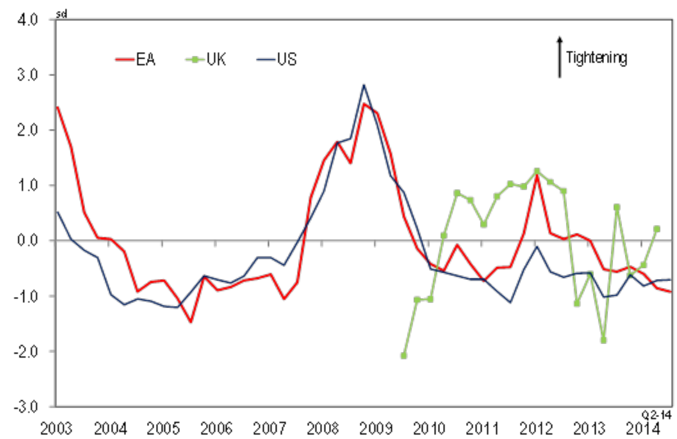
Figure 16. Selected Countries – Non-financial Corporations Real Gross Debt (%YY), 2000- Q1 2014



Note: Deflated by CPI. Non-financial corporate gross debt corresponds to loans and securities other than shares

Sources: Eurostat, National Sources and Citi Research

Figure 17. Selected Countries – Bank Lending Standards to Non-Financial Corporations (sd from mean), 2003 - Q2 2014



Note: Data correspond to net percentage balance on bank lending standards to large firms (in past 3 months). Data in standard deviations from mean.

Sources: National Central Banks, and Citi Research

Bank lending standards in the EA had developed broadly in line with those in the US and the UK until 2011. Since 2011, bank lending surveys consistently suggested that Eurozone banks were tightening their lending standards more (or loosening them less) than banks in the US. Differences with UK banks have been much more modest, and as lending standards in the Eurozone seem to ease more recently (for both HHs and NFCs) the change in lending standards seems to have re-converged even with the US banks (Figure 17).

The evolution of bank lending rates in the Eurozone has been quite different to the experience in other countries. Real bank lending rates to NFCs are higher in the Eurozone than in the US or UK and are above their average value since 2003, having risen fairly noticeably over the last 24 months (driven mainly by a fall in inflation rather than a rise in nominal lending rates, see Figure 18).[15] The share of bank loans in total bank assets, which could be seen as a proxy for banks' willingness to lend, has fallen steadily, but this appears to be the continuation of a

[12] Growth rates are calculated as the sum of 4Q flows divided by the previous year's stock.

[13] The latest Flow of Funds data are available for Q2. Since then, we suspect that both NFC and HH lending in the UK has picked up somewhat, even though even in the euro area there are slightly greater signs of vigour in the lending market, too.

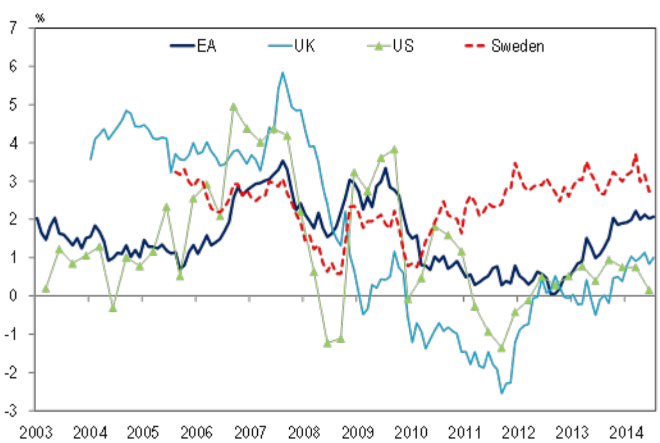
[14] See Euro Area: NFC Net Borrowing Falling More Slowly and Euro Area - Eurozone Credit Crunch Slowly Ending, Citi Research.

[15] In this section, we deflate nominal values by realised CPI to obtain real values.

long trend (loans were 64% of total bank assets in the late 1990s, against 55% more recently) and mostly in line with that in other regions (the share of different types of loans in total loans has also been relatively stable, with small shifts from loans to MFIs to loans to other financial institutions).[16]

Overall, the evidence therefore suggests that even though average bank lending conditions are not particularly benign in the Eurozone, they are not dramatically restrictive compared to other advanced economies, either. It might still matter, because bank funding is so important in the EA, if the relative tightness of capital market funding has improved more in the US than in the EA.

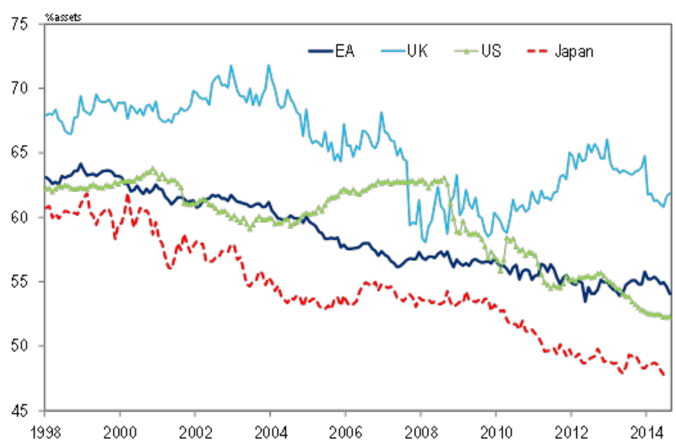
Figure 18. Selected Countries – Lending Real Rates to Non-financial Corporations (%), 2003- Jul 2014



Note: CPI deflated. Average lending rates for loans of all maturities for the EA, US and UK, and 1-5 years maturity for Denmark and Sweden. The UK data includes loans to private non-financial corporations only, while for the US it includes commercial and industrial loans.

Sources: ECB, BoE, FED, and Citi Research

Figure 19. Selected Countries – Bank Loans Outstanding (% of banks' balance sheets), 1998 - Aug 2014



Sources: ECB, BoE, BoJ, FED, and Citi Research

4.3. Reduce fragmentation in financial conditions between different euro area countries

By contrast, fragmentation of financial conditions and segmentation of financial markets between different EA countries remain a major problem in the euro area. They also stand in the way of uniform transmission of monetary policy actions across the EA and impede economic convergence, possibly to the point that could put the political viability (and perhaps even the economic viability) of the currency union into question altogether.

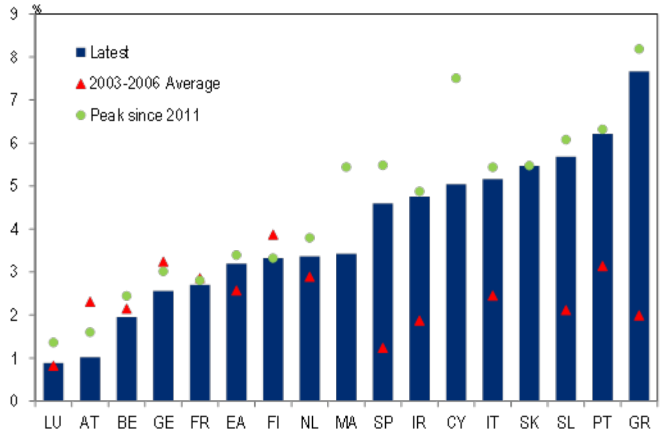
Fragmentation in financial conditions is visible along various dimensions. We highlight differences in lending rates, bank lending standards and credit growth, in particular.

The variation in lending rates in the euro area is enormous. This is the case also for borrowers whose relevant credit risk characteristics appear similar, except for national domicile. Nominal lending rates still vary quite strongly across euro area countries, in particular for consumer loans, but also for businesses (and there, particularly for small loans). But the differences are even more dramatic for real bank lending rates, as countries with high nominal bank lending rates tend to experience lower inflation, too. Real lending rates range from below 1% (Luxembourg) to 8% (Greece) for small NFC loans, from 0% (Austria) to 8%

[16] Very recently, the share of bank loans in total bank assets has in fact risen in the Eurozone, but this has been because total bank assets have shrunk faster than bank loans.

(Greece) for large NFC loans, from 3% (Austria) to 13% (Slovakia) for consumer loans and from 0.5% (Austria) to 4% (Cyprus) for mortgages (see Figure 20 and Figure 21). Divergences in real lending rates have narrowed very modestly in recent months, but much less so than for nominal lending rates. Real lending rates also remain far above the pre-crisis average in all periphery countries (while they generally remain below pre-crisis average rates in the other EA countries).

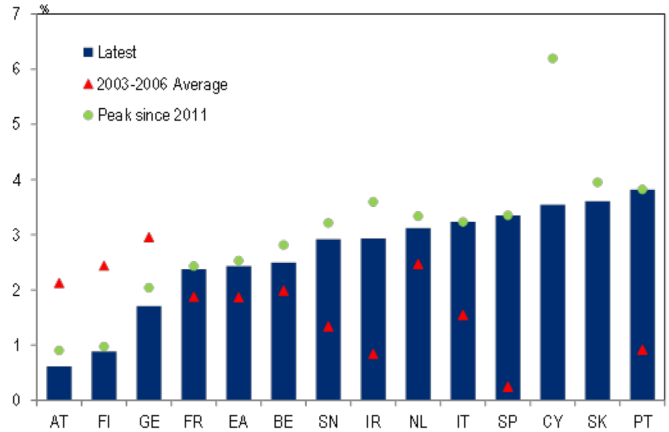
Figure 20. Selected Countries – Average Real Rates on Loans <€1m to Non-financial Corporations (%)



Note: Loans with maturity between 1 to 5 years for all countries except for Luxembourg, Ireland, Malta, Portugal and Cyprus, for which it correspond to loans with all maturities. Latest refers to Jul-14 except for Greece (May-14) and Malta (Feb-14).

Sources: ECB and Citi Research

Figure 21. Selected Countries – Average Real Rates on Housing Loans to Households (%)

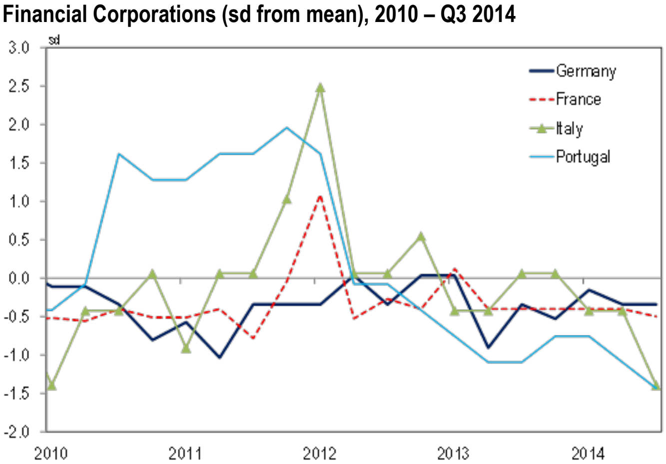


Note: Loans with all maturities. Latest refers to Jul-14. No data available for Greece, Luxembourg and Malta.

Source: ECB and Citi Research

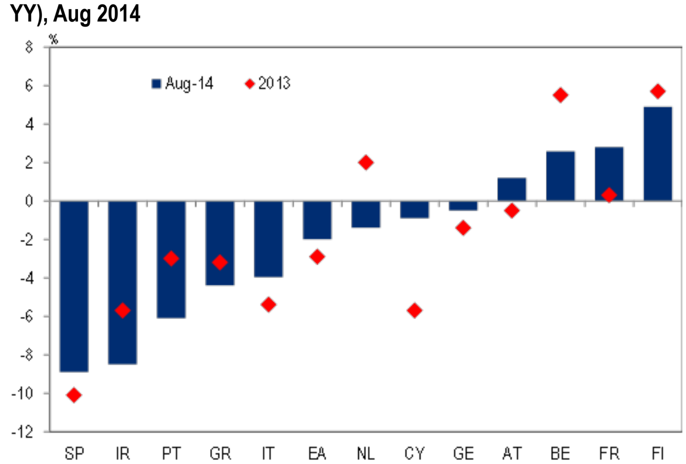
Bank lending standards also tightened much more in Eurozone periphery countries than for other EA countries, for both households and NFCs. However, recent surveys have shown that even banks in periphery countries are beginning to ease their lending standards, sometimes more so than in other Eurozone countries (Figure 22). Credit growth continues to be very different between different EA countries as well, even though differences have started to moderate. For instance, lending to NFCs in Spain or Ireland is still falling by 9%YY, but by only 2% in the Eurozone average (Figure 23).

Figure 22. Selected Countries – Bank Lending Standards to Non-Financial Corporations (sd from mean), 2010 – Q3 2014



Note: Loans adjusted by securitizations and sales
Sources: National Central Banks and Citi Research

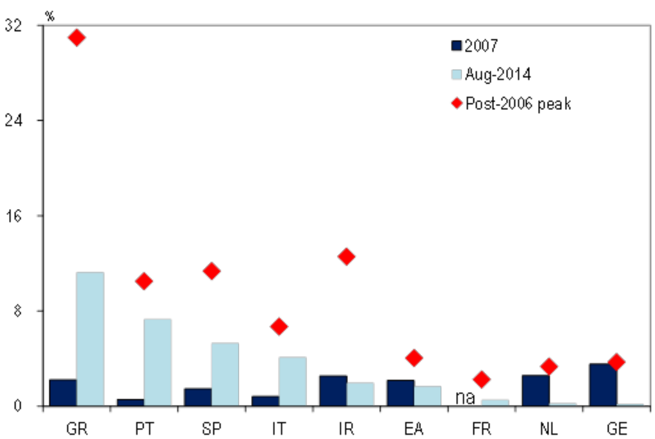
Figure 23. Selected Countries – Loans to Non-financial Corporations (% YY), Aug 2014



Note: Loans adjusted by securitizations and sales
Sources: ECB and Citi Research

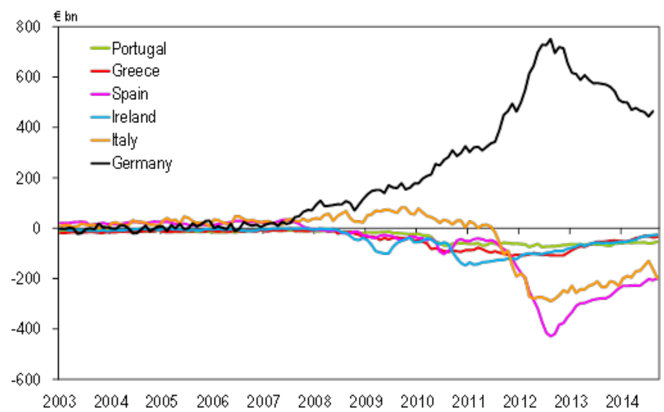
There have recently been some encouraging signs that on some dimensions financial fragmentation is diminishing. Sovereign bond spreads to Bunds have narrowed sharply for many Eurozone periphery countries. Deposit outflows, which in any case only materially affected a few periphery countries, have abated and even slightly reversed (in Greece, Ireland and Portugal). Increases in deposits and a return to market funding have meant that banks in the periphery have also been able to rely much less on ECB funding. Total ECB funding to Eurozone banks was down by €743bn (60%) from the peak in mid-2012 until the first instalment of the ECB's 4-year TLTRO facility (Figure 24). The decrease has not been uniform, as Italian and Portuguese banks until recently lagged banks in e.g. Greece, Spain or Ireland in repaying ECB funds. The overall reduction in reliance on ECB funds also substantially narrowed Target2 imbalances (e.g. joint Target2 liabilities of Greece, Italy, Ireland, Spain, and Portugal, have fallen by roughly €500bn to €511.6bn since their peak in mid-2012, although the data suggested some reversion has been taking place in Italy since Aug 2014, see Figure 25).

Figure 24. Selected Countries – Monetary Financial Institutions Eurosystem Lending (% of MFI assets)



Note: Data includes emergency liquidity assistance
Sources: ECB, National Central Banks, and Citi Research

Figure 25. Selected Countries – Target2 Net Amount Outstanding (€ bn), 2003- Sep 2014



Sources: National Central Banks and Citi Research

4.4 The fourth objective: bringing the ECB on board

From its inception, banking union's significance has gone beyond its potential direct impacts to include indirect effects on other policies and on other institutional innovation. For example, in the summer of 2012 the willingness of the various euro area governments (e.g. the French and the Spanish) to give up sovereignty over banking supervision encouraged the German government to do the same, contributed to Germany allowing the Target2 system to continue when Target2 imbalances were soaring, and agreeing to, at some point, create a mutualised bank recapitalisation facility. In our view, the commitment to move towards banking union (notably the decision to improve and centralise supervisory standards, and to create more effective laws and institutions to resolve and potentially jointly recapitalise banks across the Eurozone) in turn was a major factor in the ECB's decision to create the OMT in 2012.[17]

[17] The ECB did not claim the role of single supervisor for itself. Rather, the commitment to carry out a rigorous Comprehensive Assessment was a prerequisite for both the ECB and the Eurozone 'creditor countries' to accept that role for the ECB.

These developments were hugely significant in ending the (so far) most acute phase of the Eurozone crisis. But banking union's significance for ECB policy continues. In our view, without banking union (and in particular the Comprehensive Assessment), the ECB probably would have been more reluctant to create the TLTRO facilities recently, and even more so, to buy ABS or covered bonds. The reciprocity between ECB action and other policies (at both the euro area and the national levels) did of course not start with banking union. For instance, the ECB's decision to carry out government purchases under the SMP was contingent on EU-IMF bailout programmes in the case of Greece, Ireland and Portugal (a weaker version of such a link was also there for SMP purchases of Italian and Spanish bonds and for the Troika programme for the Spanish banking sector).

We expect the partly reciprocal interplay between ECB policy and other Eurozone policies to continue, but with banking union entrenched, the ECB should generally be more willing (and, through its supervisory role, more able) to act supportively of economic activity in the euro area through innovative and more aggressive conventional and unconventional monetary and credit policies. The same reciprocity will probably also apply to a potential QE decision.

4.5. Wouldn't national action be sufficient?

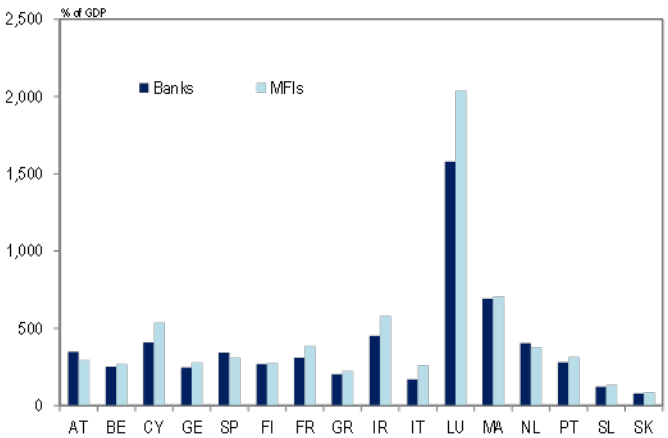
The need for action at the euro area level is based on two factors: the shortcomings of national arrangements and the insufficiency of national arrangements as regards the pursuit of the first two objectives (increasing financial stability and improving access to funding). National institutions and policies have little hope of effectively addressing the third objective (ending financial fragmentation and segmentation). The fifth objective (creating an effective lender of last resort and market maker of last resort) also likely necessitates a significant pan-Eurozone element.

Regarding the first, recent history has shown that the quality of national macroprudential and microprudential arrangements for the financial sector in most euro area countries proved deficient (the same was true in the UK, the US and Switzerland prior to the eruption of the crisis). Part of that may be the result of regulators and politicians taking their eye off the ball and regulatory or political capture by financial sector interest groups, but the large size of banks relative to the size of the economy in number of EA countries puts the ability of individual EA countries to regulate, supervise and take remedial action for banks in question. Total assets of the EA banking sector, excluding foreign branches and subsidiaries, amounted to more than 230% of GDP at end-2013 (and 270% of GDP, including foreign branches and subsidiaries), down from 300% in 2008. In Cyprus or the Netherlands, banking sector assets are above 400% of GDP (Figure 26).[18] This compares to around 70-80% of GDP for commercial banks in the US.[19]

[18] Including foreign assets and subsidiaries, total assets were close to 330% of GDP in 2012 for the euro area, just over 600% for Cyprus and Ireland, and 1000% for Luxembourg. See ECB (2013), "Banking structures report", November 2013, http://www.ecb.europa.eu/pub/pdf/other/bankingstructuresreport201311en.pdf?5656762fc7710c2ad62b381f432eff9f. The size of total assets of monetary-financial institutions (MFIs), which include money market funds as well as banks, in the EA was 336% of GDP in Q2 2013 and ranged from 83% in Slovakia to 2180% in Luxembourg.

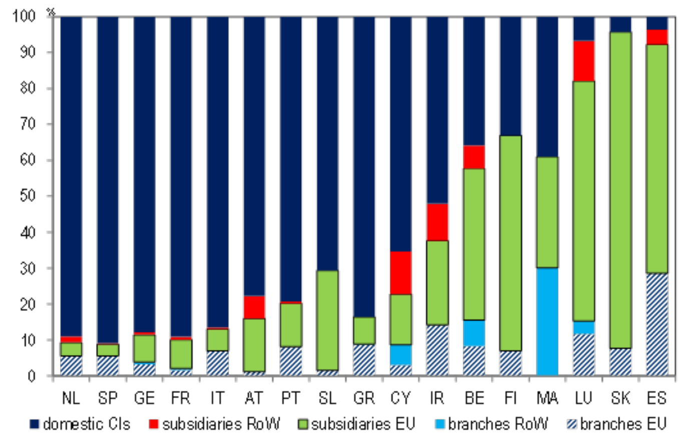
[19] Differences in accounting rules complicate the comparison between balance sheet sizes on different sides of the Atlantic and between different economies more generally. However, our understanding is that such accounting changes do not account for a substantial part of the difference in the size of the respective banking sectors in the US and the Eurozone.

Figure 26. Selected Countries – Financial Institutions Balance Sheet Size (% of GDP), 2013



Sources: ECB and Citi Research

Figure 27. Selected Countries – Composition of Banking Sector by Type of Credit Institution (% of total), 2012



Note: Credit institutions (CIs). Rest of the World (RoW).
Sources: ECB and Citi Research

Even though financial and banking sector integration in the Eurozone has fallen sharply in recent years, it remains large by international standards, which would make having some EA/EU level institutional arrangements desirable. These would be necessary, if the ambition of an EA/EU wide single financial market were to ever be achieved.

5. The Comprehensive Assessment

The legislation for the Eurozone's Single Supervisory Mechanism (SSM) specifies that the ECB will take on supervision of significant Eurozone banks following a 'comprehensive assessment, including a balance sheet assessment' of such banks.[20] But the significance of the Comprehensive Assessment (CA) goes beyond this technical condition. Its main objectives are fourfold, in our view: i) to allow the ECB to separate itself from past supervisory failings, ii) to reveal legacy losses in the expectation that resulting capital holes would be plugged promptly (for systemically important institutions) or lead to other remedial actions, including liquidation[21], iii) to jumpstart the process of supervisory harmonisation[22] and iv) to elicit a 'downpayment' from Eurozone governments to support additional ECB actions to safeguard the survival and functioning of the Eurozone.

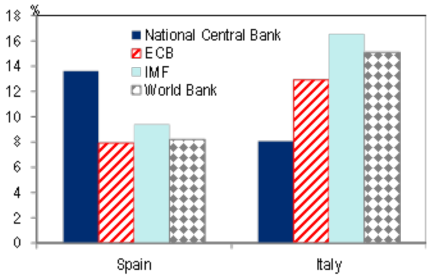
The success of the CA depends mainly on two factors, in our view: i) whether it will be rigorous enough to burnish the ECB's credibility as a supervisor and to reveal capital holes and ii) whether these capital holes will actually be filled, if they involve systemically important banks (which is of course not the ECB's responsibility).

[20] See European Parliament legislative resolution of 12 September 2013 on the proposal for a Council regulation conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions (COM(2012)0511 – C7-0314/2012 – 2012/0242(CNS)).

[21] The IMF's October 2013 Global Financial Stability Report (GSFR) notes that differences in bank capital are one reason behind financial fragmentation within and across EA countries, as banks with lower ratios of capital and reserves to NPLs or total assets had lower lending growth and charged higher lending rates. The IMF estimated that banking and sovereign stress add 160bp to lending rates in Spain and 100bp in Italy and that weak profitability means that earning their way back to a strong capital position is challenging. See IMF, "Global Financial Stability Report", October 2013.

[22] ECB Executive Board Member Mersch said in a speech in September 2013 that even under the new (CRD IV and CRR) EU transpositions of the global Basel III guidelines, more than 100 "' flexibilities' remain, of which widely varying definitions of non-performing loans are only one". See Mersch, Y, "Towards a European Banking Union", 30 September 2013.

Figure 28. Selected Countries – Non-Performing Loans (% total gross loans), 2013



Sources: National central banks, ECB, IMF, World Bank and Citi Research

The CA is a mammoth exercise: it covers 131 banks (127 banking groups) across 18 countries (the current Eurozone countries plus Lithuania, which will join in January 2015), accounting for roughly 85% of Eurozone assets (i.e. around €25trn). It consists of three parts.

1. A supervisory risk assessment to identify the most relevant portfolios.

2. An asset quality review (AQR), covering 'at least 50% of the banks' credit risk-weighted assets and 50% of their significant portfolios. The ECB noted that it had selected 760 loan portfolios for detailed examination and that the review covers €3.7trn in risk-weighted assets in banking books or 58% of the total banking book assets of the banks covered, of which 65% are corporate portfolios and 29% retail assets. In addition, trading book assets and derivative liabilities are reviewed, too.

3. A stress test, carried out in cooperation with the European Banking Authority (EBA).

The Comprehensive Assessment is now in the final stages, namely the 'join-up' of the AQR and stress test results. The ECB will announce the final results on 26 October 2014, at 12 noon CET on its website.

5.1 Will the CA be a success?

To assess the likelihood of the success, we consider four factors: i) the availability of backstops, ii) the process and powers given to the ECB, iii) the available AQR and stress test assumptions, and iv) the behaviour of the parties involved (i.e. banks, governments, and supervisors). In our view, the second and the fourth factors suggest that the CA is being taken seriously by the entities involved. The third factor looks more mixed, as the available assumptions could certainly have been stricter to increase the credibility of the exercise, but they are undoubtedly much more stringent than in previous pan-European stress tests. This is despite the fact that public backstops are still inadequate and effective resolution authorities will not be ready in time (when the results of the AQR and stress test are announced). But to some extent the readiness of market investors to invest in the equity of Eurozone banks has compensated for the lack of a public backstop and it is also a sign that the CA has at least in part already managed to increase confidence in the Eurozone banking system.

Taken together, we therefore think that the CA likely meets the minimum standards to be called a success. Of course, in the medium-term, its success will be judged by whether additional legacy issues will be uncovered in the future, by whether it manages to help improving financial conditions in the foreseeable future, and by whether it contributes to the de-zombiefication of the euro area banking sector and turns it into an enabler and facilitator of economic growth.

5.1.1 The Nature of the backstops

Backstops for the CA matter for two reasons. The first and most obvious is that they may be needed to fill the capital shortfalls revealed in the CA and thereby help put the Eurozone banking system on a stronger footing. The second, and subtler, reason is that the availability of backstops may affect the willingness of the ECB to impose strict assumptions and scenarios. The reason is that if the CA were very strict and revealed large capital shortfalls, it is possible that panic could set in in financial markets, which could well require the ECB to intervene. We are not concerned about the ECB's ability and willingness to perform its lender-of-last-resort and market-maker-of-last-resort role for private financial institutions and for key financial markets, but it would be preferable if these were not put to the test. In a nutshell, it is likely that the stronger the available backstops, the easier it is for the ECB to push for a strict CA; a dearth of backstops may compromise the ECB's willingness to push for a strict CA.

Overall, our assessment is that there are some backstops but that these still remain inadequate in the sense that they would probably not suffice should capital shortfalls be very large, and especially if capital shortfalls are large in countries with fiscally weak sovereigns. The so-called 'capital waterfall' to fill bank capital shortages revealed in the CA is to: i) issue additional bank equity to private purchasers, ii) bail-in junior and hybrid creditors according to the EU's State Aid rules, iii) recapitalize banks using fiscal resources from the domestic government from its own resources, iv) recapitalisations by the domestic government funded by an European Stability Mechanism (ESM) programme (like the one Spain had between 2012 and 2013), v) bail in of unsecured creditors, including possibly unsecured senior bond holders and unprotected depositors, according to the Bank Recovery and Resolution Directive (BRRD) requirement that at least 8% of the balance sheet must be bailed in before there can be recourse to the tax payers – domestic or mutuallised, vi) direct recapitalisation by the ESM, subject to its (inadequate) limit of a maximum exposure of €60bn. It is worth noting that the bail-in rules that apply also to senior unsecured creditors in principle only take effect in January 2016 and are therefore not generally available to help plug capital holes after the CA. However, some individual countries, including Germany, may have introduced equivalent country-specific legislation by then and it is also possible that individual countries will bail in even unsecured creditors in an ad-hoc fashion before the BRRD/SRM bail-in rules take effect.

In addition to the lack of a single, large, mutually funded public backstop or an effective way to bail in unsecured creditors in sufficient size, the fact that it took a long time to cobble together even this rather convoluted and still sub-standard arrangement is rather discouraging. To our knowledge, the German parliament is yet to sign off on giving the ESM even its limited direct recapitalisation instrument (the relevant bill was presented to parliament for discussion in late September 2014).

The buoyant state of equity markets during the first three quarters of 2014, and the ability of many banks to raise private capital, has diminished, but in our view by no means negated, the importance of an adequate publicly funded backstop. As noted, market appetite for bank appetite can be fickle. This leaves us with the risk that unexpectedly large capital shortfalls could trigger some instability in the markets. And the lack of credible mutualized and (in some cases) national fiscal backstops suggest that the ECB may have been less strict in the design and implementation of the AQR and the stress test than it otherwise would have been.

5.1.2 Process and powers

The process and setup of the CA seem broadly appropriate. This is because in contrast to previous pan-European stress tests, the CA ticks a number of key boxes: i) the CA includes an asset quality review, ii) the ECB has direct access to supervisory information, iii) the ECB has direct relationships with the assessed banks (and can request information from them and the national supervisors), and iv) third-party advisors are hired by the ECB (not the national regulators/supervisors/ authorities) to assist in the AQR.

However, we highlight four caveats: i) the limited scope of the banks covered, ii) the fact that third-party advisors of individual national supervisors (which were not required, but also not ruled out in the ECB's blueprint) are not chosen by the ECB, iii) the fact that the test relies very heavily on national authorities (even though there is supposed to be 'cross-checking' across national authorities) and iv) the fact that the ECB has limited enforcement powers over banks or national authorities during the AQR and stress tests, which took place before the ECB actively dons the mantle of the apex of the SSM on November 1, 2014.

On the first of these caveats, even though, reasonably enough, the criteria to select banks for the Comprehensive Assessment seem to be based on size and interconnectedness[23], they are still open to criticism. In particular, the number of small banks is very differently distributed across countries. Thus, almost half of all banks that will not be covered by the SSM are German and Germany, Italy and Austria together account for almost 80% of all banks not covered by the SSM or the CA.[24] Given the manifest failures of German banking regulation and supervision during the decade leading up to the GFC, it is a special source of concern that the SSM and the CA only cover around 65% of the German banking sector by assets (against the 80-85% of assets for the Eurozone as a whole, as noted above). The exclusion of small banks from the SSM and the CA may have been based on considerations of practicality and subsidiarity. We fear, however, that the fact that such an exclusion was not included in the original EC proposal for the SSM in September 2012, is strongly supportive of the view that the exclusion of small banks was inserted into the CA only after heavy lobbying by the German government, regulators and supervisors. The fact that a disproportionate number of German banks are excluded from the CA leaves a bad aftertaste, made worse, by the poor track records of German banks (large, medium-sized and small) during the GFC and afterwards. They also have received substantial amounts of government financial support in recent years, as we describe in Section 4.[25]

It is sometimes suggested that the ECB's incentive to protect its reputation and to avoid future problems would be a sufficient reason for the CA to be adequately rigorous. We acknowledge that the ECB values, and has a strong incentive to protect, its reputation. At the same time we also note that the ECB faces various trade-offs and it is not obvious that the incentive to protect its reputation would necessarily dominate other ECB objectives.[26]

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[23] A bank is deemed 'significant' (covered by the SSM and included in the CA) if it satisfies at least one of the following conditions ('unless justified by particular circumstances to be specified in the methodology'): i) total assets > €30bn, ii) ratio of assets over establishment country GDP > 20%, unless total assets < €5bn, iii) notification of national significance by the national supervisor, subject to confirmation by the ECB, iv) requesting or receiving public financial assistance directly from the EFSF or the ESM, v) being one of the three most significant credit institutions in the country ('unless justified by particular circumstances'). The ECB may also select additional banks as long as they are active in more than one EA country and has significant cross-border assets or liabilities.

[24] The full list of banks included and not included in the SSM is available at http://www.ecb.europa.eu/pub/pdf/other/ssm-listofsupervisedentities1409en.pdf?59d76de0c5663687f594250ebf228c6b. See also Veron, N. "Europe's Single Supervisory Mechanism: Most small banks are German (and Austrian and Italian)", Bruegel, 22 September 2014

[25] The fact that the so-called community banks are explicitly excluded from the US transposition of Basel rules on capital adequacy and many other forms of regulation is sometimes used as a justification to similarly exclude small banks in the Eurozone from many elements of regulation. We do not agree with this reasoning, for two reasons. First, the US has a long track record of resolving small banks through the FDIC (and which can to some extent make up for supervisory and regulatory weaknesses), whereas Europe does not. Second, small banks in Europe and in particular, clusters of interconnected small banks, such as the saving banks in Germany, can pose a material risk to the financial system and/or the taxpayer. This is consistent with recent remarks by ECB Executive Board member Lautenschlaeger on September 30 (see https://Europe – Sovereign Debt Update 01-Oct-14).

[26] The ECB's analytical approach and methodology has also been criticised, including by the German bank supervisor Bafin. See e.g. http://www.handelsblatt.com/politik/konjunktur/geldpolitik/bafin-chefin-koenig-deutsche-finanzaufsicht-kritisiert-ezb/10139672.html

5.1.3 AQR and stress test assumptions

The publicly available assumptions are only *selectively* conservative. However, the rigour of the CA assumptions is difficult to assess conclusively, particularly for the most important part (the AQR), as much depends on the enforcement and interpretation of the assumptions and valuation approaches.

- **Capital hurdle:** The capital hurdle is 8% Common Equity Tier 1 (CET1) for the AQR and for the baseline scenario of the stress test and 5.5% for the adverse scenario – somewhat higher (and thus more demanding) than the 4.5% hurdle for the 'severely adverse' scenario in the latest US stress test. However, these capital hurdles are based on the phasing rules of Basel 3 over the time horizon of the test rather than the fully phased Basel III ratio that tends to be highlighted in banks' own communications.[27] Banks that fail the baseline scenario of the stress test or the AQR have six months to plug their capital holes, whereas banks failing under the adverse scenario have nine months to fill shortfalls (and can count certain types of AT1 (additional Tier 1, e.g. CoCos) capital up to 1% of risk-weighted assets towards the capital threshold).

- **NPL definition:** The harmonised NPL definition the ECB is applying is that exposures should be identified as non-performing if: i) they are at least 90 days past due, ii) the relevant entity has had credit default swap spreads of more than 1,000 basis points within the previous five years, iii) the relevant entity has benefited from 'forbearance', iv) the debt service coverage ratio of the entity is larger than 1.1. The change in NPL definitions was presented as one of the reasons for increases in bank provisions in Q4 2013.

- **Asset valuation and risk weights in the AQR:** There are many additional focus areas for the AQR in particular. Among these are the valuation of certain types of assets, including real estate, shipping loans, more general collateral valuation, Level 3 assets (illiquid assets, usually 'marked to model') and foreign equity holdings. Banks' internal risk-weights are also meant to be assessed, even though the CA is not tasked with a comprehensive evaluation of how appropriate internal bank risk weights are. These issues are of high significance, in our view, as they cover many of the areas where (thus far hidden) legacy losses could be suspected. But we are not in a position to judge how rigorous the CA treatment has been.

- **Macroeconomic baseline scenario in the stress test:** The baseline scenario for the stress tests seems rather benign (see Figure 29), even though that is in part due to the fact that the macro outlook has worsened in the months since the baseline scenario was set. The scenario implies average growth for the Eurozone of 1.6% pa in 2014-16, roughly 0.2pp more than we expect currently. The baseline expectations look particularly optimistic for France, Greece, and Italy, in our view. The inflation projections are similarly optimistic, with average Eurozone inflation in 2014-16 forecast at 1.3% pa vs 1.0% pa in our forecast, and larger differences between the EBA baseline and our forecast in the cases of Greece, Italy and Portugal.

[27] The EBA has noted that individual competent authorities 'can apply additional thresholds such as fully phased-in Basel 3 capital ratios, but these will also be presented separately from the common EU wide exercise.'

- **Adverse macroeconomic scenario:** The adverse scenario of the stress test is also at most *fairly* strict. The cumulative difference in GDP growth in 2014-16 between the baseline and the adverse scenario is 6.6pp, similar to the difference (between the baseline scenario and the 'severely adverse' scenario) in the latest US CCAR test. The assumptions on inflation (with a cumulative difference in the price level of 1.9pp), unemployment (a cumulative difference of 2.2pp), equity prices (18pp) and commercial property prices (12pp) appear rather benign to us. This is true in comparison with the US CCAR exercise, but also compared to the (different) assumptions for the UK or Sweden in the EBA stress test, which are much harsher than the assumptions for the Eurozone. It is worth noting in particular that even the adverse scenario for the Eurozone only features deflation in one Eurozone country (Greece).

- **Sovereign bond treatment in the stress test:** One issue of concern is the large amount of (own) sovereign exposure of Eurozone banks (see also Section 4 and 7). In the stress test, securities held in the trading book are marked-to-market in the AQR and subjected to a 'sovereign risk' shock in the stress test, which, for 10Y bonds, ranges from 4.7% for Cyprus to 31.3% for Greece (with most Eurozone countries at 20-25%) in 2014 and between 6.1% for Lithuania and 13.4% for Greece for 2016 (with most countries around 10%). For holdings in the banking book, the stress imposed is generally smaller and imposed through amending risk weights and potential impairments based on internal model assessments and ECB/ESRB assumptions (which are not public, to our knowledge), and, for available for sale (AFS) holdings of sovereign debt, by applying prudential filters based on the valuation haircuts for trading book positions (which apply 20% of unrealised losses in 2014, 40% in 2015 and 60% in 2016). It is thus not true that sovereign exposure will escape the scrutiny of the stress test, but the assumptions chosen hardly amount to a very adverse case.

- **Interest and non-interest income and expenses:** banks need to provide their own projections, both for a baseline and an adverse scenario, subject to interest income not being larger than its 2013 value and non-interest income not being larger relative to total assets than in 2013 (and a number of additional restrictions and a 'thorough quality assurance process').

In our view, somewhat stricter assumptions would have helped to strengthen the credibility of the CA and increase the resilience of the Eurozone banking sector, provided that the resulting capital shortfalls for systemically important banks could and would be filled. At the same time, we suspect that the criteria could well be tightened when the exercise is repeated in the future. The ECB has already announced that it plans to carry out smaller annual assessments and the experience in the US and elsewhere has shown that the stringency of such tests often increases over time.

Figure 29. EBA/SSM Stress Test – Macroeconomic Assumptions, 2014-2016

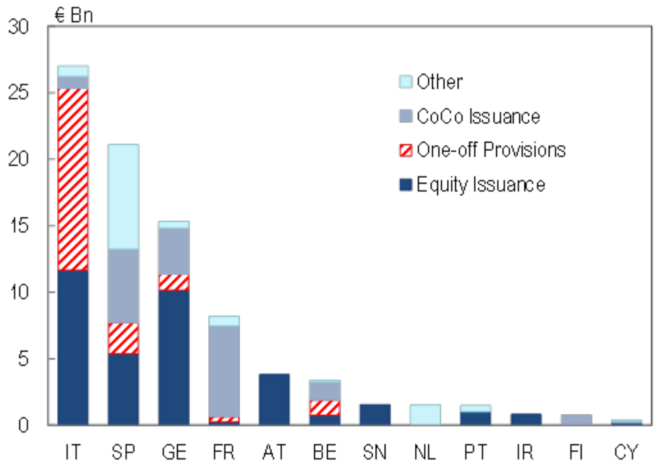
Country	Real GDP					Inflation					Deviation adverse vs. baseline in 2016 (pp)				
	2014	Baseline (%YY) 2015	2016	Deviation adverse vs. baseline in 2016 (pp)	Deviation Citi vs. baseline in 2016 (pp)	2014	Baseline (%YY) 2015	2016	Deviation adverse vs. baseline in 2016 (pp)	Deviation Citi vs. baseline in 2016 (pp)	Unem-ployment Rate	Residen-tial Property Prices	Commer-cial Property Prices	Govern-ment Bond Yields	Equity Prices
Germany	1.8	2.0	1.8	-7.6	-0.2	1.4	1.4	1.5	-1.5	0.5	1.8	-20.8	-16.2	0.8	-15.5
France	1.0	1.7	2.3	-6.0	-1.8	1.2	1.2	1.3	-2.2	-0.1	1.3	-26.6	-11.5	1.0	-18.1
Italy	0.6	1.2	1.3	-6.1	-2.3	0.9	1.3	1.8	-1.4	-3.2	2.4	-13.4	-9.5	1.5	-20.4
Spain	1.0	1.7	2.2	-5.9	0.6	0.3	0.9	1.3	-1.0	-1.3	3.9	-8.9	-6.1	1.4	-24.9
Netherlands	1.0	1.3	1.7	-5.4	-0.1	1.1	1.3	1.6	-2.3	-0.1	2.8	-20.6	-15.6	1.0	-23.9
Belgium	1.4	1.7	1.4	-6.0	0.1	0.9	1.4	1.5	-2.8	-0.1	3.0	-24.9	-7.1	1.1	-24.1
Ireland	1.8	2.9	2.4	-8.1	7.5	0.8	1.1	1.4	-1.9	-0.9	2.6	-18.9	-15.4	1.1	-16.0
Greece	0.6	2.9	3.7	-7.9	-4.0	-0.6	0.2	1.1	-3.3	-3.0	2.1	-16.1	-9.7	2.3	-26.6
Portugal	0.8	1.5	1.7	-7.8	0.9	0.8	1.2	2.0	-3.7	-3.6	2.8	-10.6	-5.2	1.7	-23.1
Cyprus	-4.8	0.9	1.9	-3.7	na	0.4	1.4	1.7	-1.5	na	1.4	-15.6	-8.5	1.0	-26.6
Luxembourg	2.2	2.5	1.8	-8.7	na	1.5	1.7	1.8	-0.7	na	0.2	-17.5	-9.4	1.1	-18.0
Austria	1.5	1.8	1.7	-6.7	na	1.8	1.8	1.9	-1.6	na	1.4	-13.2	-3.6	1.0	-14.3
EA	**1.2**	**1.8**	**1.7**	**-6.6**	**-0.7**	**1.0**	**1.3**	**1.5**	**-1.9**	**-0.8**	**2.2**	**-19.2**	**-11.7**	**1.1**	**-18.1**
UK	2.5	2.4	1.6	-7.6	3.2	2.0	2.0	2.1	-5.3	-0.7	5.1	-29.2	-26.7	1.0	-17.5
Sweden	2.5	3.3	2.5	-10.2	-0.8	0.9	1.8	2.1	-8.8	-1.2	5.4	-29.1	-23.8	1.1	-21.7
EU	1.5	2.0	1.8	-7.0	na	1.2	1.5	1.7	-2.8	na	2.9	-21.2	-14.7	1.1	-19.2
US	na	na	na	-5.4	na	na	na	na	-7.7	na	na	na	na	na	na
Japan	na	na	na	-5.9	na	na	na	na	-2.8	na	na	na	na	na	na
China	na	na	na	-6.8	na	na	na	na	-6.5	na	na	na	na	na	na
India	na	na	na	-10.4	na	na	na	na	-4.9	na	na	na	na	na	na
Russia	na	na	na	-7.8	na	na	na	na	-2.2	na	na	na	na	na	na
Latam	na	na	na	-4.4	na	na	na	na	-17.4	na	na	na	na	na	na
Recent stress tests:															
US (2014)	2.8	2.9	2.8	-6.1	na	2.0	2.3	2.3	-2.6	na	4.6	-33.4	-43.8	-2.4	-26.0
Greece (2013)	0.6	2.9	3.7	-8.9	na	-0.4	0.3	1.1	-1.9	na	2.0	-16.2	-16.0	na	na
Spain (2012)	-1.7	-0.3	0.3	-4.8	na	1.8	1.6	1.4	-3.3	na	3.8	-17.1	-42.7	na	na
Ireland (2011)	0.9	1.9	2.5	-5.0	na	0.4	0.6	1.6	-0.9	na	4.1	-23.9	-24.7	2.6	na

Note: For other stress tests date of publication is shown on brackets, while reported years correspond to relevant subsequent years. For the US, adverse scenario corresponds to the "severely adverse scenario".
Sources: European Banking Authority, Fed, Bank of Greece, Bank of Spain, Central Bank of Ireland, and Citi Research

Separately from concerns about the stringency of the assumptions, several industry commentators, including the head of the German bank supervisor BAFIN have criticized the methodology the ECB has applied in the CA. Some of the criticism is about the effort banks had to undertake to provide the required data (including collecting data they sometimes previously did not have) and about the fact that the requirements and methodological guidelines were changed at various times. A perhaps more substantial concern is that the need for comparability across banks and across countries has limited the ability to reflect bank- and business-model specific factors, with the consequence that some banks may be unfairly punished (while others presumably get off when they should have been penalised). What this points to is the need to move as swiftly as practicable to a single legal and regulatory framework for banks and financial markets in the Eurozone (and indeed the EU) – the single rule book – which would provide the right incentives for developing more homogeneous financial sector business models in the euro area in the future.

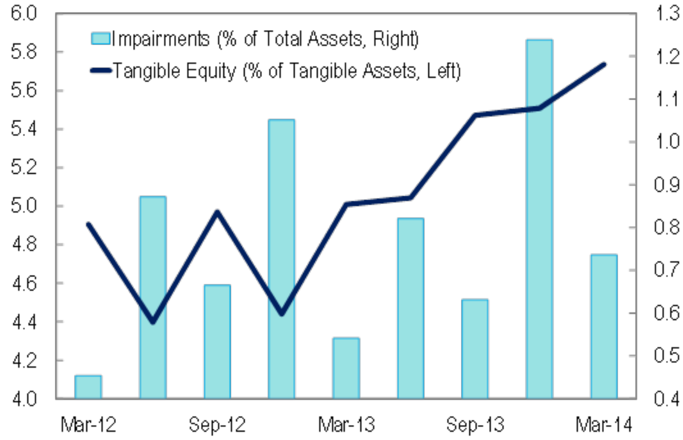
5.1.4 Responses

Figure 30. Selected Countries — Capital Raised by Significant Banking Groups Since July 2013 (€Bn)



Sources: ECB Financial Stability Review and Citi Research

Figure 31. Euro Area — Significant Banking Groups Tangible Equity (% of Tangible Assets) and Impairments (% of Total Assets), 2012-14

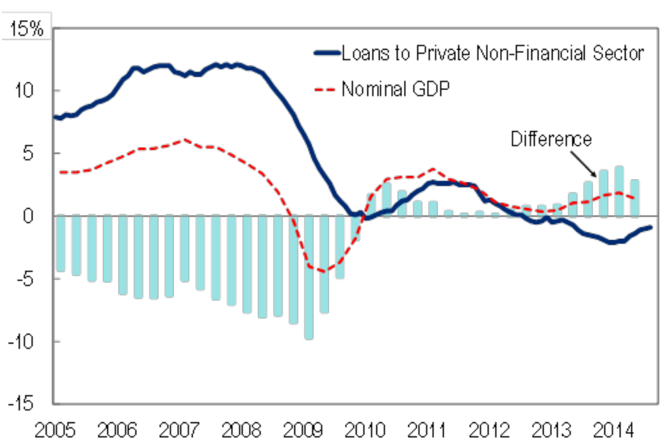


Sources: ECB and Citi Researce

In terms of the behaviour of banks and governments, the CA appears to be having quite noticeable effects. Thus, the ECB's Financial Stability Review (FSR) in May 2014 highlighted that:

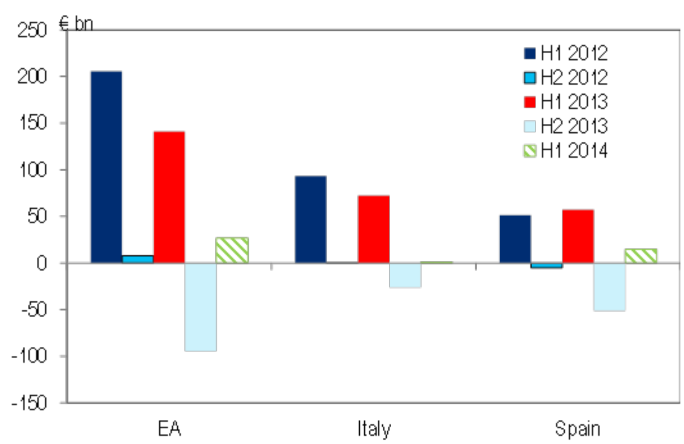
- The Eurozone's 'Significant Banking Groups' (SBGs), a proxy for the group of banks covered in the CA, had raised capital by €45bn between July 2013 and May 2014 (when the FSR was published).[28] The bulk of this capital build-up has taken place in Italy, followed by banks in Spain and Germany (see Figure 31), and, at least anecdotally, equity offerings of Eurozone banks appear to continue. Private capital raisings by Eurozone banks have picked up noticeably over the last 12 months (Figure 34).

Figure 32. Euro Area — Nominal GDP (%YY) and Bank Loans to the Private Sector (%YY), 2005-14



Note: Loans to private non-financial sector (i.e. households and non-financial corporations) adjusted by securitization and sales.
Sources: ECB, Eurostat and Citi Research

Figure 33. Selected Countries — Net Purchases of Domestic General Government Securities (€Bn), 2012-14



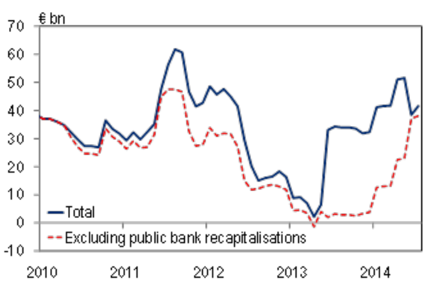
Sources: ECB and Citi Research

[28] The ECB defines SBGs as the 'consolidated group level analogue of these significant banks, which amounts to up to 90 banking groups (depending on data availability).

- Impairment charges taken by Eurozone banks were comparatively high in Q4 2013 (at more than 1% of assets for the median SBG) and Q1 2014 (see Figure 32. They were probably high in Q2, too, even though the data were not available at the time of the last FSR). Despite the increase in impairment charges, ratios of tangible equity to tangible assets are still rising fairly steadily. In Q1 2014, they stood at 5.7% for the median SBG, compared to 5.0% in Q1 2013 and 4.2% in 2008.

- Eurozone monetary-financial institutions (MFIs) have reduced assets by €4.3trn since May 2012 and SBGs by more than €5trn or 20% from the peak, even though the ECB's recent Banking Structures Report highlighted that a large share of the deleveraging is accounted for by a reduction in derivative positions (and increased use of trade compression and trade reconciliation, including netting) and of external assets. However, the ECB report still says that a cutback in total loans accounted for a quarter of the total deleveraging. The balance sheet reduction has been fairly steady, but deleveraging efforts may in fact have accelerated in some ways since the CA was announced. For instance, the difference between nominal GDP growth (lagged by two quarters) and growth in private sector loans seems to have picked up noticeably in mid-2013 when the CA was prepared and announced and has continued to go up (see Figure 32).

Figure 34. EA – Net Issuance of Quoted Shares by MFIs (€ bn), 2010-2014



Note: 12-month sum of net flows. MFIs are monetary-financial institutions. Dotted line excludes selected (but not all) public bank capital injections in Ireland, Greece, Spain, and Portugal, identifiable in these data.
Sources: ECB and Citi Research

In addition to banks, national supervisors, central banks and governments also seem to have adjusted their behaviour in light of the CA. Thus, central banks and national supervisors in a number of countries have carried out their own 'pre-assessments' of bank balance sheets (including in Germany and Italy) and have put pressure on domestic banks to increase provisions and raise capital ahead of the CA results. Governments have also taken measures to bolster bank balance sheets, including through the conversion of deferred tax assets (DTAs) into tax credits in Spain and Greece (Italy had done so already in 2011) and the revaluation of Italian banks' stakes in the Bank of Italy. Such creative capital engineering of course only strengthens the solvency of the banks at the expense of that of the sovereign, which incurs contingent liabilities (in the case of DTAs) and, as de-facto beneficial owner of the central bank loses a claim on future central bank profits, in the case of the Banca d'Italia's equity revaluation.

The CA has probably also had a modest impact on banks' willingness to take on exposure to domestic governments. Relative to total assets, domestic government exposure is at multi-year highs for a broad range of EA countries, but that is partly because total bank assets have fallen and the value of their government bond holdings risen, rather than additional government bond purchases recently. *Net purchases* of domestic government bonds and loans have on average been negative since H2 2013 for the euro area as a whole as well as for individual countries including Italy, Portugal and Spain (see Figure 33). By contrast, the previous 18 months had seen sizable net purchases of government bonds and loans. In addition, there was a sizable 'window dressing' effect in December 2013, the snapshot date for the AQR, when some Eurozone banks sold government bonds (only to often buy most of them back in January 2014). The re-emergence of significant sovereign risk spreads over Bunds for the euro area periphery may make it harder for domestic banks to resist pressures to take on additional domestic sovereign debt.

5.2 How large will capital holes be?

One key remaining question is how large the revealed capital shortfalls will be. In December 2013, the Bruegel think-tank reported that analysts' estimates ranged from €50-650bn.[29] The range of estimates of actual capital shortfalls we have seen recently is much smaller and at the lower end of this range (and below). Our colleagues in equity research think that remaining capital losses will be around €12bn for the institutions they cover (which account for roughly 60% of the assets of banks in the CA and take into account up to €16bn capital raised over the year).[30] We do not have an own estimate of capital shortfalls, but in this section we offer some contextual data on the size of relevant exposures, capital action taken so far and losses in previous bank crises that highlights that the uncertainty surrounding the capital needs remains quite large.

5.2.1 A snapshot of the Eurozone banking system

According to ECB statistics, total assets (unconsolidated) of Eurozone MFIs amounted to €31.1trn (324% of GDP) in August 2014.[31] A bit more than half (54.1% to be precise) of the assets of Eurozone MFIs are loans to Eurozone residents, 15% are debt securities of Eurozone residents, 4.1% equity, 13.5% non-Eurozone assets (loans, securities, etc), and 13% remaining assets (which include derivatives and accounts receivable).[32] The Consolidated Banking Data by the ECB cover a different sample and are subject to a number of different accounting conventions. For H1 2014 it records total assets of domestic Eurozone banks at €23.1trn and those of foreign banks in the Eurozone at another €3.8trn, with loans (and advances) accounting for 61% of total assets. As noted above, the banks subject to the CA will cover approximately 85% of total Eurozone bank assets, so probably around €23trn in (unconsolidated) assets and perhaps €11-14trn in loans to Eurozone residents (assuming that the share of loans in total assets of the CA banks is similar to all banks in the Eurozone).[33]

Even though the CA is in principle an evaluation of all bank exposures, its focus is on credit risk. But as already noted above, one type of credit risk – the exposure to sovereigns – will likely only play a minor role. That is not insignificant, as exposures to Eurozone governments amount to €2.9trn or 9.4% of assets, and substantially more in some other countries, such as Italy or Spain. MFI loans to Eurozone households and non-financial corporations amount to €5.2trn (16.7% of assets) and €4.3trn (13.8%), respectively. Of loans to households, the majority (€3.8trn) are mortgage loans. MFI loans to other MFIs account for €5.2trn (16.7%) and loans to other financial corporations accounting for another €1.1trn (3.4%).

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[29] See Merler, S. and G. Wolff, "Ending Uncertainty: Recapitalisation under European Central Bank Supervision", Bruegel Policy Contribution, December 2013.

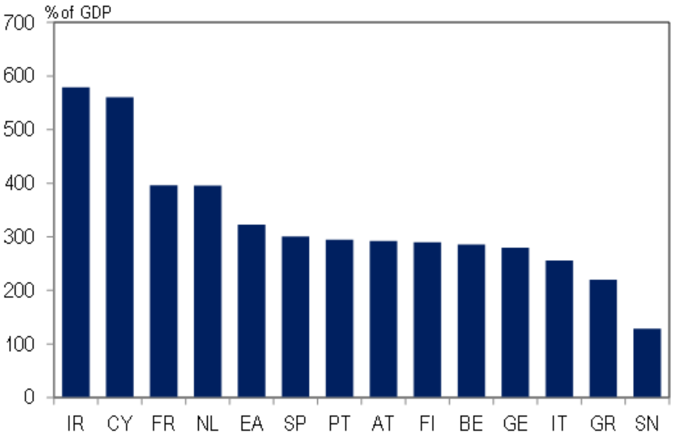
[30] See Stress Test: To Believe, or Not Believe, Kinner Lakhani, Sep 2014, Citi Research

[31] MFIs include money market funds as well as credit institutions. The ECB also publishes data on the balance sheet of aggregate credit institutions in the EA, which are very similar to the aggregate data for MFIs. Total assets amounted to EUR29.9trn in Q2 2014, and loans to EA residents amounted to EUR16.8trn. We use the MFI statistics as they are available for individual EA countries and at greater granularity.

[32] Remaining assets include i) financial derivative positions subject to on-balance-sheet recording, ii) gross amounts receivable in respect of suspense items, iii) gross amount receivable in respect of transit items, iv) gross amount receivable in respect of future settlement of foreign exchange transaction, v) accrued interest receivable on loans, vi) dividends to be received, vii) amounts receivable which do not relate to the reporting MFI's main business. There are also fixed assets, which account for less than 1% of the total. See http://www.ecb.europa.eu/pub/pdf/other/manualmfibalancesheetstatistics201204en.pdf?426543c0dbb56bb78f5afd978b44db17

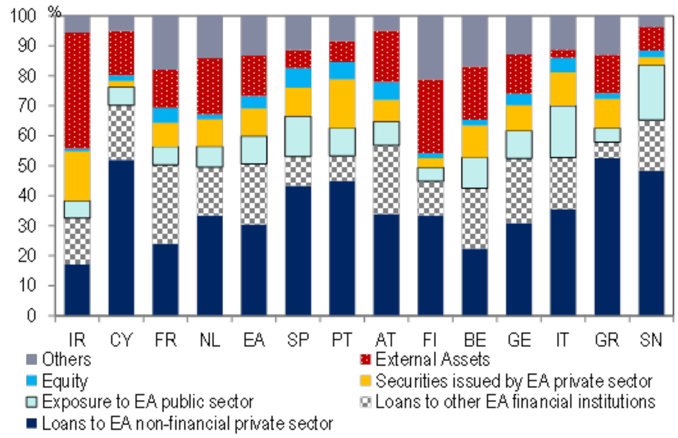
[33] See https://www.ecb.europa.eu/pub/pdf/other/notecomprehensiveassessment201310en.pdf

Figure 35. EA Countries – MFI Total Assets (% of GDP), Aug 2014



Sources: ECB and Citi Research

Figure 36. EA Countries – MFI Total Assets (% of total), Aug 2014



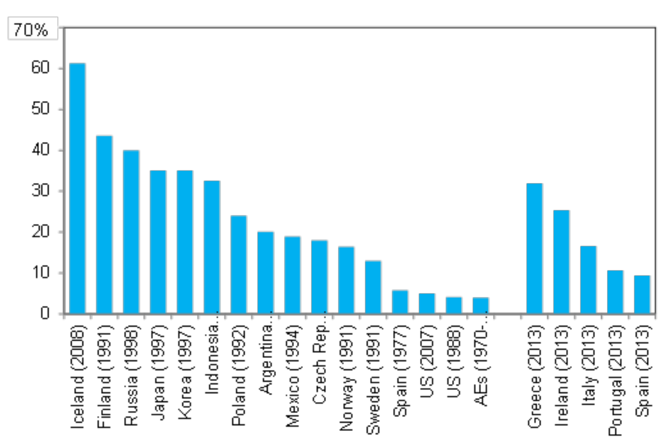
Note: other include fixed assets and remaining assets.
Sources: ECB and Citi Research

The composition of assets, however, is far from uniform across EA countries. For instance, loans to households and non-financial businesses tend to be bigger relative to total bank assets in countries with smaller banking system. In Estonia, Slovakia, Cyprus, and Greece this type of lending accounted for over 50% of MFI assets, while it represents roughly 20% of MFI assets in France and Belgium, and less than 10% in Luxembourg.

5.2.2 Reference points from previous crises

Each banking crisis has its own unique characteristics. But the historical experience in banking crises can still be informative. In many previous banking crises, bank losses have been substantial. For instance, in Japan excess credit costs (defined as credit costs above usual provisioning rates) between 1996 and 2003 were almost 15% of the private sector loan book in 1996. In Denmark and Sweden, major banking crises in the 1990s also resulted in loan losses of around 10% of the loan book or more.

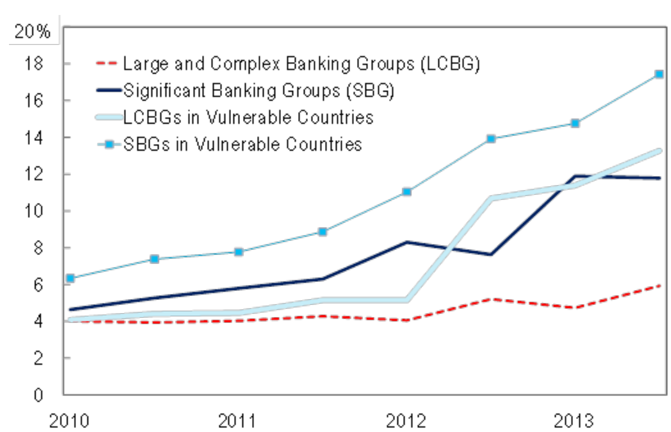
Figure 37. Non-Performing Loans in Europe Compared to Past Banking Crises (% total gross loans)



Note: NPLs from IMF Financial Soundness Indicators. Advanced economies (AEs) average for 1970-2011.

Sources: Laeven and Valencia (2012), "Systemic Banking Crises Database: An Update", IMF WP/12/163, IMF and Citi Research.

Figure 38. Euro Area — Non-Performing Loans (% of Loans), 2010-13



Note: Vulnerable countries include CY, GR, IR, IT, PT, SN and SP.
Sources: ECB, Eurostat and Citi Research

The above cases were among the more extreme banking crises. A study by Laeven and Valencia (2012) finds that the median peak NPL for financial crises in advanced economies in 1970-2012 was 4% of loans (see Figure 37). Assigning a loss-given-default (LGD) of 45% to the hypothetical 4% peak NPLs would translate into average losses of less than 2% of the loan book. That seems a rather low reference point to us, for several reasons. First, larger banking systems could easily (and have historically) implied proportionally (not just absolutely) larger losses in the aftermath of credit busts. The Eurozone banking system is much larger than the average banking sector in the historical average of financial crises. Second, the peak NPL ratio in the euro area already substantially exceeds the historical average (with suitable qualifications for the non-uniformity of NPL definitions in the euro area and between the euro area and countries in earlier historical episodes). NPLs during 2013 in the Eurozone already ran at more than 7% of total loans according to the World Bank. For now, NPLs are still rising (notably for banks in 'vulnerable countries', see Figure 38), and fast enough for coverage ratios to barely have kept up with the rise in NPLs.

Yet another reference point is that losses in those EA countries where the losses of the banking sector had to be revealed because they were too large for the national sovereigns to back-stop without external assistance (thus far only comprehensively for Ireland and Cyprus, and partially for Spain, Portugal, Greece and Slovenia) were up to 10% of the balance sheet. Taking the range of potential losses to be 2-15% and applying it to private sector loans alone and for 85% of the Eurozone banking system gives a range of €160-1,210bn, with the mid-point of that range at €690bn.

5.2.3 Losses and capital needs

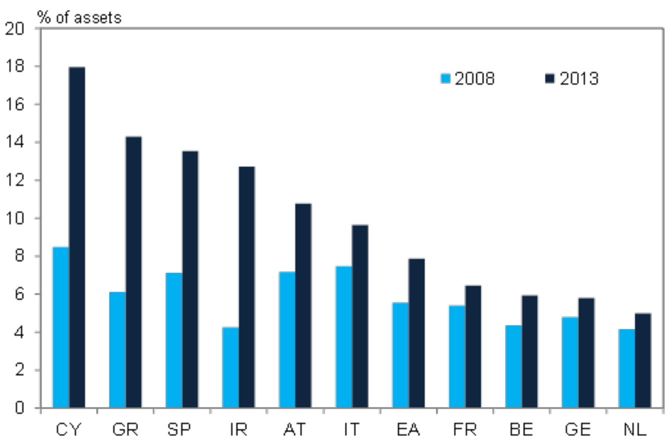
As we already noted, the above data are only reference points rather than accurate guides for the likely size of eventual bank losses in the Eurozone. Each banking crisis is different and bank losses are a function of the economic environment and a range of policy and bank choices, even though the combination of a very large banking system, the prospect of years of subdued nominal and real GDP growth, a material risk of deflation and a difficult policy environment suggest that the outlook is, at best, no better than for the average past banking crisis.

But credit losses are of course not the same as capital needs, as banks may have surplus capital, built up provisions (and written down asset values) and can, given time, generate future profits and sell assets to offset losses. The ECB's Financial Stability Review in May 2014 noted that the average Core Tier 1 capital ratio of euro area 'significant banking groups' (SBGs) was above 11% of risk-weighted assets, with more than 90% of SBGs above 9%. Large and complex banking groups (LCBGs, a subset of SBGs) in the Eurozone had at 10.4% of CET1 capital in Q1 2014, which is clearly above the CA threshold (and even the fully phased in 2019 Basel III minimum), even though it was still slightly below the global median of LCBGs. Even though these numbers are "pre-AQR adjustment", they imply that there could be a moderate capital buffer for many banks that could absorb additional losses.

Provisions and impairments already taken by Eurozone banks have amounted to almost €850bn since 2008 and write-downs of household and corporate loans according to the ECB's Consolidated Banking statistics have amounted to roughly €400bn. The MFI data suggest that provisioning activity is now at least 50% higher than pre-crisis, suggesting that perhaps somewhere between €200-400bn of the additional costs imposed by the crisis have been digested so far (of which a large share presumably has been accounted for by the banks in the CA).

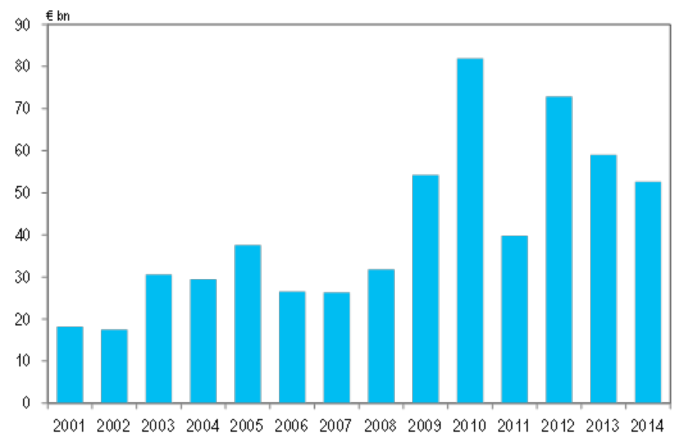
Finally, given time, future operating profits can also be used to absorb some of the losses in the CA, as noted above. The EBA recently noted that annual after-tax profits of so-called Group 1 banks (a group of 40 large EU banks) was €62.3bn in 2013, suggesting that the CA may include profits of at least €60bn per year in 2014-16 (our colleagues in equity research estimate that net attributable profits of the banks they cover sum to approximately €140bn in 2014-15).

Figure 39. Selected Countries — MFI Capital-to-Asset Ratio (%)



Note: Ratio of capital and reserves to total assets of monetary-financial institutions.
Sources: ECB and Citi Research

Figure 40. EA – MFI Write-downs of Loans to Private Non-financial Sector (€ bn), 2001 - 2014



Note: 2014 corresponds to Jan-Aug.
Sources: ECB and Citi Research

Overall, these reference points suggest that there have been considerable efforts at balance sheet repair. Yet the uncertainty around the potential capital shortfalls still remains large both with respect to the capital shortfalls revealed in the CA and as regards the additional losses that could potentially accrue in the future, given that the low-growth, very low inflation prospect for the Eurozone may aggravate banks' asset quality problems in the future. It is also worth stressing that the data we discussed above are *aggregate* data. The distribution of capital buffers, and potential losses and profits varies quite widely between countries and between individual institutions, which can raise capital shortfalls (as capital shortfalls in one institution are not cancelled out by 'surplus capital' in another).

As regards the scope for shortfalls revealed in the CA, national policymakers, regulators and supervisors have generally tended to downplay the potential for large capital shortfalls, particularly for their own domestic banks.[34] On the other hand, a number of national and EU policymaker statements have stated that they do expect some banks to fail the CA and exhorted banks to try to raise capital before the CA is concluded.[35]

[34] For instance, the head of the SSM Supervisory Board Danielle Nouy noted on 9 July that she thought 'Eurozone banks are in better shape than markets think'.

[35] See e.g. remarks by ECB President Dragui in Nov 2013 (http://www.ecb.europa.eu/press/key/date/2013/html/sp131122.en.html) or ECB Vicepresident Constâncio in May 2014 (https://www.ecb.europa.eu/press/key/date/2014/html/sp140512.en.html)

It is worth noting that even if relatively large 'headline' capital shortfalls were to be announced in October, this need not be systemically destabilising. In particular, the ECB's communication will likely communicate capital needs in part as of the balance sheet snapshot date of end-December 2013. As highlighted above, since then banks have continued to strengthen their balance sheets, so some of the 'headline' capital holes will already have been filled. Furthermore, many banks continued to have access to equity markets to fill potential capital shortfalls, at least until Q4, 2014, and the ECB will give banks 6-9 months to do so (or, to a lesser degree, to dispose of assets) after the CA is concluded. And, as noted above, national and mutualised public backstops are in principle available, subject to having bailed in junior debt according to the EC's State Aid rules.

One question we often encounter is which countries (or banks in which countries) may be most vulnerable. On the one hand, economic and financial divergence across Eurozone countries persists, suggesting that perhaps capital shortfalls would be largest in the periphery countries. On the other hand, many of the periphery countries (notably Ireland, Cyrus and Spain) have gone through some form of bank stress tests in recent years and a larger degree of bank restructuring. Italy will be in particular focus for the CA results given it has not had a major country-specific stress test and how weak the economy is. However, it should also be noted that Italy had less of a credit and housing boom than other periphery countries before the crisis and has a somewhat smaller banking system (relative to the size of the economy) than many other EA countries.

6. The current state of the (banking) union

The EU Summit in December 2012 agreed on a basic set of ingredients for banking union in the euro area, including a single supervisory mechanism (SSM) a single resolution mechanism (SRM) and a Single Deposit Guarantee System (SDGS). The SSM in particular is also meant to be related to efforts to have an EU-wide single rulebook for banks.[36] Almost two years on, we review the progress on the path towards banking union.

6.1 Regulation and the Single Supervisory Mechanism

Centralising supervision and regulation is the most advanced part of the banking union agenda. Regulation and the idea of a 'single rulebook' are in principle in the hands of the European Banking Authority (EBA) and EU-level legislation. The EU's new Capital Requirements Directive (CRD IV), which is the EU's transposition of the Basel III rules, went into effect on 17 July 2013 (with transposition into national law in the following months).[37]

However, as noted by the chair of the EBA Andrea Enria (and relayed in a speech by ECB Executive Board member Yves Mersch), even with CRD IV, more than 100 "flexibilities" (aka deviations from common treatment) still exist.[38] These range from the definition of non-performing loans and regulatory forbearance to the definition of capital (both of these have now been harmonised in principle by the EBA). Much hope is being pinned on a 'Single Rulebook' to be produced by the EBA that would significantly narrow down some of these "flexibilities".[39] Such harmonisation into a single rulebook for banks is to take place at the EU level, and not just for euro area banks. Even though the EBA has made a start, it is still unclear when an effective Single Rulebook will be in place.

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36 See http://register.consilium.europa.eu/pdf/en/12/st00/st00205.en12.pdf.

37 The accompanying Capital Requirement Regulation went into effect on 28 June 2013, with some provisions to apply from 1 January 2014.

38 See http://www.ecb.europa.eu/press/key/date/2013/html/sp130930_1.en.html

39 See http://www.eba.europa.eu/regulation-and-policy/single-rulebook

The Single Supervisory Mechanism (SSM) for EA banks is due to come into effect on November 4.[40] In our view, even though it is a tall order to create the supervisory infrastructure and harmonise bank supervision in such a short period of time, the SSM looks like a major step forward. Its governance arrangements are as unified (albeit more complex) as those of the ECB, which should help to establish a truly pan-European approach to bank supervision, as its powers also appear broadly adequate to allow it to raise and harmonise supervisory standards in the Eurozone.

The ECB is developing a supervisory manual as well as supervisory templates that 'its' banks will need to comply with. It will also have a full 'toolbox' of supervisory instruments at its disposal to ensure compliance with capital, leverage, liquidity or governance requirements. However, the ECB will have to comply with the rules and standards set by the EBA just as national supervisors do. The ECB will have the authority to grant or withdraw banking licenses to and from *all* banks (not just the 123 directly under its supervisory yoke), the authority to collect on- and off-site information, to undertake on-site inspections (in cooperation with the national supervisors), and to validate banks' internal models and risk controls. The ECB is also given a set of macroprudential tools, including the authority to impose additional capital, liquidity and other prudential requirements, even though their precise scope still needs to be clarified.

National authorities are to continue to directly supervise all other EA banks, but the ECB is meant to be in charge. Thus, even non-significant banks should be expected to comply with large parts of the ECB's supervisory manual and reporting requirements. The national supervisory authorities will also have to comply with ECB regulations, guidelines or general instructions. The ECB will have access to all data for all banks, and the ECB will have the right to intervene in the non-systemically significant banks and to exercise its supervisory powers directly. But for the most part, day-to-day supervision of non-systemically significant banks will be carried out by national supervisors, with some form or regular reporting to the ECB.[41]

Meanwhile, the national supervisors are still going to be involved even for the supervision of the significant banks. This is inevitable, given the speed with which the contraction of banking supervision powers at the supranational level has proceeded, but inevitably will make for a long period of ungainly co-existence and interaction in the supervisory domain between a waxing ECB and a waning set of national supervisor(s). The ECB is meant to publish detailed procedures for the cooperation and division of labour between the ECB and the national supervisors. The interaction is likely to be rather complex: There will be joint supervisory teams (JSTs) led by the ECB with representatives from both the ECB and the relevant national supervisor. The JSTs propose inspections, in which they participate without leading them. The inspections are led by a Head of Mission, who is nominated by the ECB but generally hails from the national supervisor, even though it is not ruled out that the ECB can take the lead. In addition, there are meant to be on-site inspections which are independent of JSTs. National supervisors will also remain responsible for all aspects of supervision that are not explicitly allocated to the ECB (including conduct supervision).

[40] The relevant legislation took effect on November 4, 2013. It specifies that the SSM would take effect no earlier than one year after that date.

[41] Organisationally, the third Directorate General of the ECB's new supervisory structure (DG Micro-Prudential Supervision III) will host the conduct of indirect supervision over less significant banking groups.

To reduce the risk of continued regulatory and supervisory capture at the national level, we believe as little power as possible should be left to local (national) supervisors. To that effect it would be desirable to have, as soon as is practical, an IMF-style arrangement when it comes to assigning supervisors to banks in a particular country: e.g. send the Germans to France, and the French to Germany. The ability of the ECB to 'hire and fire' the heads of national supervisors would also come in handy. Supervisory requirements to be decided centrally should also be mandatory for all banks even though these requirements could depend on the size of the institution (to ease the administrative load and costs for smaller banks), to maximize the benefits of harmonization and, again, to limit the room for local transgressions.

The continued major role of national supervisors is one concern. A related one is the number and scope of banks directly supervised by the ECB. This closely relates to the concern we have about the scope of banks included in the CA, which we discussed in Section 5. The SSM will be tasked with supervising *all* EA banks, but it will only directly supervise the 'significant' banks (based on absolute size, size relative to its domicile economy and size of cross-border activity).[42] This leaves 95% of Eurozone banks (accounting for 15-20% of assets) to be directly supervised by national authorities, with a larger share in a number of countries, most notably Germany.

The fairly complicated governance structure of the SSM and its legal status are also a concern. The SSM was created with the ECB as its centre, as Article 127 of the Lisbon Treaty already included a provision for the European Council to confer 'specific tasks' on the ECB relating to the 'prudential supervision of credit institutions and other financial institutions with the exception of insurance undertakings.'[43] Eurozone politicians thus saw an opportunity to install a Eurozone-level supervisor that did not involve the extensive national decision-making procedures that creating a new EU authority and delegating further powers to an EU body would probably have required.

But having the ECB in this role comes at some cost. First, there is the repeated sense that the existing Treaties are being tortured to comply with present-day realities, necessities and policy preferences – which is nothing new of course. Second, the Lisbon Treaty also imposes the ECB Governing Council as the only decision making body of the ECB. This has two implications: any major supervisory decisions would in some form have to be signed off by the Governing Council, and non-EA members would not be represented at that decision-making stage. The first is of concern to those who fret about conflicts of interest between monetary policy and financial stability, while the second can be a concern to non-EA countries that might want to join the SSM (even though several non-Eurozone EU countries have expressed an interest in joining the SSM, not have formally entered into the required .

[42] The conditions for a bank to be significant and to be directly supervised by the ECB are:
conditions:
- i) total assets > €30bn,
- ii) ratio of assets over establishment country GDP > 20%, unless total assets < €5bn,
- iii) the bank is one of the three most significant credit institutions in the country ('unless justified by particular circumstances').
- iv) its national supervisor deems it significant, subject to confirmation by the ECB,
- v) the bank has requested or receiving public financial assistance directly from the EFSF or the ESM

[43] See http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2010:083:0047:0200:en:PDF

The SSM will have a Supervisory Board which be exclusively concerned with supervisory tasks and decisions. The Supervisory Board will be composed of the SSM Chair and Vice-chair, four ECB representatives and one representative each of the national supervisors for each participating EU member state. It will take decisions with simple majority. Those decisions will go into effect unless they are explicitly rejected within two weeks by the Governing Council (or in urgent cases within two days), and the ECB GC will have agendas and meetings to decide on supervisory matters that are separate from its monetary policy decisions. The SSM Chair and Vice-chair have to be approved by the Council and the European Parliament before the first Supervisory Board meeting can take place. A steering committee composed of eight members, including the SSM Chair and Vice-Chair, one ECB representative and five national representatives, will be concerned with the day-to-day decisions of the SSM and prepare the Supervisory Board meetings. A 'mediation panel' will be set up to resolve potential disagreements between the Supervisory Board and the ECB GC.

This arrangement is also meant to address concerns about accountability. The ECB enjoys little formal or substantive accountability, despite its important role. This is based on the old belief that monetary policy (interest rate policy) is a technical and apolitical matter. That was always a spurious notion (interest rate changes redistribute between creditors and debtors and both the asset and liability management of a central bank have distributional and other quasi-fiscal consequences, as does the distribution of the central bank's profits – both over time and between different shareholders (national central banks) at a point in time). The lack of accountability is anchored in the Lisbon Treaty which was meant to protect the independence of the ECB, in particular from the influence of the 'weak currency' countries. Pretty much all the ECB has to do is for the ECB President to give testimtony in front of the Economic and Monetary Affairs Committee (MONEC) of the European Parliament once every quarter.

By virtue of being housed in the same institution, the protection of the Treaty will also extend to the Supervisory Board of the ECB. Supervision and regulation are widely acknowledged to be deeply and obviously political, as they are all about limiting or re-assigning property rights and about different mechanisms for expropriation. When the possibility of non-market recapitalisation exists (as with resolution and recovery), the quasi-fiscal or explicitly fiscal dimensions tend to be apparent and matters become unavoidably political. Thus, the SSM will have its own accountability framework vis-à-vis the European Parliament, the Eurogroup and national parliaments. Thus, the Chair of the SSM's Supervisory Board will have to appear before the European parliament once per quarter. It remains to be seen whether the accountability framework proposed for the SSM has any more hope of being effective than the purely token accountability framework for the ECB as monetary policy maker.

6.1.1 On the conflict between monetary policy and financial stability

Should a central bank also be the main institution to guard financial stability? Macroprudential responsibilities should clearly be shared by the central bank and the fiscal authorities, if tax payers' money is put at risk, either by the Treasury/Ministry of Finance directly, or through quasi-fiscal actions of the central bank, of which the Treasury is the beneficial owner.[44] But what about microprudential ones? The Bundesbank in particular seems adamant that monetary

[44] In the case of the ECB, the NCBs of the EA member states are the owners of the bulk of the paid-in capital. The ultimate beneficial owners are the Treasuries/Ministries of Finance of the EA member states.

policy and (microprudential) financial stability roles should be carefully kept separate. The rationale of avoiding potential conflicts of interest seems mostly to be based on a concern that a central bank that is also tasked with financial stability would be insufficiently sensitive to inflation concerns. However, that does not seem obvious. In the absence of 'attention costs', 'span of control' constraints or institutional multi-tasking limitations, it would seem efficient to combine the two tasks of monetary policy maker and bank supervisor, as long as the synergies between the two roles were large enough, exactly to optimally trade-off between the two key objectives of a central bank – macroeconomic stability (price stability for the ECB) and financial stability.

Financial stability does, however, require the participation of the fiscal authorities because tax payers' money may be at risk when the solvency of banks and other financial institutions is threatened. In the euro area this creates unique problems, because the single central bank that matters (the ECB) faces 18 (and soon 19) national fiscal authorities. A Eurozone version of the US Financial Stability Oversight Council would be unworkable. This institutional idiosyncrasy has two implications. First, the ECB has a more prominent role in Eurozone financial stability than any other central bank has for domestic financial stability. Second, until the Eurozone comes up with an effective (preferably a common or single) fiscal back-up for the ECB in its financial stability role, the EA is institutionally more vulnerable to financial instability than any other advance economy. The fact that the European Systemic Risk Board (the supreme financial stability body for the EU as a whole) is dominated by central banks, has the ECB accounting for the majority of voting members and has no voting members representing the EU national fiscal authorities is an illustration of the fiscal vacuum at the heart of the EU and, even more worrying, at the heart of the Eurozone.

6.2 Recapitalisation and Resolution: BRRD and SRM

Single recapitalisation and resolution arrangements for the euro area will be laid out gradually. Recovery, recapitalisation and resolution, and EA and national arrangements have substitutive and complementary elements. The more efficient resolution arrangements are, in particular as regards the ability to efficiently bail in bank unsecured creditors according to clear, well-understood seniority rankings, the less essential are large tax payer-backed (national and/or mutualised) recapitalization funds.

There are two major elements to the pan-European institutional improvements in the resolution area: The EU's Bank Recovery and Resolution Directive (BRRD), which took effect on 12 June 2014, obliges individual EU countries to introduce special resolution regimes for banks, including provisions for the quasi-mandatory bail-in of most unsecured creditors other than protected depositors if a bank fails and cannot raise money privately. It also mandates the creation of national resolution funds. The Eurozone's Single Resolution Mechanism takes effect in January 2015 and involves a Single Resolution Authority (SRA) and a Single Resolution Fund for euro area countries.

The central element of the new resolution arrangements are the bail-in provisions which are to take effect from January 2016. Until a few years ago, hardly any EU country had agencies with US (FDIC)-style resolution powers, let alone an efficient resolution authority, which was one of the major reasons Eurozone governments regularly ended up footing the bill for bank bailouts. Special resolution arrangements would allow the resolution authority to seize all or part of the bank, to establish a bridge bank, to separate assets (including moving them into a purpose-designed bad bank) and to impose losses on investors through bail-ins (writedowns of equity and/or debt and/or debt-to-equity conversions).

In recent years and even before the BRRD and SRM were being negotiated, a few European countries already introduced special resolution regimes of different forms for banks, including in the UK, Ireland, Denmark, Germany and Spain. During the transition to banking union, flexible yet efficient national resolution arrangements (according to a common template) and domestic fiscal space could reduce the need for Eurozone-level resolution mechanisms.[45] However, in practice centralized Eurozone resolution and recapitalization arrangements would likely play an essential role, for several reasons. First, even if a common template (like the one contained in the current proposals for the BRRD) is adopted by all Eurozone member states, different resolution and recapitalisation arrangements for different countries would lead to competitive advantages and disadvantages for banks from different countries. Second, recapitalising or resolving banks with significant cross-border activities is likely to be messy, time consuming and costly in the absence of a Eurozone mechanism. Third, many Eurozone countries do not have the fiscal space to provide any significant support even as a last resort, should their systemically important banks need it.

The bail-in rules of the BRRD and the SRM are meant to be identical. They include provisions to allow the bail-in of a broad class of liabilities, notably all of which are not explicitly excluded (secured liabilities, employee salaries and pensions, accounts payable, covered deposits and short-term payment and interbank liabilities).[46] In addition, the BRRD/SRM allow national authorities to exclude liabilities on a discretionary basis i) if they cannot be bailed in within a reasonable time, ii) to ensure continuity of critical functions, iii) to avoid contagion, iv) to avoid value destruction that would raise losses borne by other creditors.

The ‘included’ liabilities are Common Equity Tier 1, Additional Tier 1 instruments, Tier 2 instruments, other subordinated unsecured debt, the deposit guarantee fund (up to what would be paid out in insolvency), senior unsecured debt and certain large uninsured deposits. Losses not imposed on the excluded liabilities are to be relayed to the included/eligible liabilities, as long as ‘no creditor is worse off’ (NCWO) than under normal insolvency proceedings, or to be covered by the national resolution fund. The BRRD/SRM also introduce a ‘super priority’ for insured deposits (up to €100k) and a ‘simple priority’ for retail deposits (deposits of natural persons, micro and SMEs above €100k) and liabilities to the European Investment Bank (EIB). The latter category will rank below insured deposits, but above all other senior unsecured claims. This is different from the US regime, where all deposits have preference over senior unsecured claims in resolution.

To prevent banks from circumventing the bail-in rules, the BRRD/SRM includes additional requirements to have sufficient bail-inable liabilities. Such minimum requirements for own funds and eligible liabilities (MREL) are based on the size, risk characteristics and the business model of banks.

[45] Conversely, one would of course expect that an effective EA recapitalisation and resolution mechanism could leave national mechanisms redundant.

[46] The excluded liabilities include covered deposits, secured liabilities including covered bonds, liabilities to employees of failing institutions (such as fixed salary and pension benefits), accounts payable (commercial claims relating to goods and services), commercial claims relating to goods and services critical for the daily functioning of the institution, liabilities arising from a participation in payment systems which have a remaining maturity of less than seven days, inter-bank liabilities with an original maturity of less than seven days, as well as liabilities to deposit guarantee schemes, tax and social security authorities, and protections for client money.

The BRRD mandates the buildup of national resolution funds, to provide temporary support to institutions under resolution through loans, guarantees, asset purchases, or capital for bridge banks. As noted above, they could also be drawn on to compensate shareholders or creditors if their losses under bail-in exceed the losses they would have undergone under normal insolvency proceedings, in line with a 'no creditor worse off' principle. The national resolution funds have a target level of at least 0.8% of covered deposits, to be funded by the contributions of banks over 10 years and according to the size and riskiness of their liabilities (excluding own funds).[47] The SRM includes a Single Resolution Fund for Eurozone countries, which will be formed by the gradual pooling of individual country contributions and eventually reach €55bn by 2022 – a puny amount relative to the size of the Eurozone banking system.

But even these privately-funded national resolution funds may only step in up to a certain limit and only after losses amounting to 8% of liabilities (or, 'under special circumstances', 20% of risk-weighted assets) have been borne by shareholders and unsecured creditors. Even when the national resolution funds are involved, their contribution is limited to 5% of the total liabilities of the institution in question. The EC presented its blueprint for the contributions of banks to the resolution fund on October 21, with contributions related to the size and riskiness of banks (even though small banks are meant to pay a flat fee).

The BRRD and SRM still allow for national public support, under the proviso that such support is in principle meant to be exceptional and temporary. In particular, public support may be given as (i) a state guarantee backing central bank liquidity; (ii) a state guarantee for newly issued liabilities; or (iii) a capital injection at market price, as long as the institution still fulfills the 'authorisation requirements' and is solvent.

6.2.1 The SRM

The SRM in addition creates a Eurozone-wide single resolution authority (SRA), to help to avoid excessive national discretion in the application of shareholder and unsecured creditor bail-in rules and would facilitate the resolution of cross-border institutions. It would also provide a natural counterpart to single supervision, with the SRM covering all banks supervised by the ECB, cross-border groups and resolutions where use of the Single Resolution Fund is foreseen.

The Single Resolution Board (SRB) is the central decision-making forum of the SRM and consists of a Chairman, Deputy, four permanent members and one representative each of the national resolution authorities (with the ECB and EC having permanent observers). The Executive or Plenary Session of the SRB adopt resolution decisions on a notification by the ECB that a bank is failing. However, the EC and the European Council have the power to object to the proposed resolution scheme (with the European Council having in principle the final word). National authorities are also involved in the resolution process, as they help to prepare resolution decisions and are in charge of implementing them in line with national company and insolvency laws. The unwieldy resolution process to reach a resolution decision, with final decision-making power lying with the European Council was chosen at the insistence of the German government, which had major concerns about the legality of other, potentially more straightforward, setups, e.g. such as putting final resolution authority in the hands of the EC or the SRB instead.[48] Strict deadlines for all decisions needed for the resolution of a bank, of 32 hours in total, are meant to ensure that resolution decisions can be taken over the course of a weekend.

[47] The proposal leaves it open for the national resolution funds to be combined with national deposit guarantee funds, subject to the combined total size being at least as large as the sum of the individual requirements.

[48] The nature of the resolution authority and decisions probably require that any common resolution power at the European level be vested in an EU institution (such as the Council, the EC or the ECB) rather than, say, an agency (such as the EBA).

In our view, the SRM is also a major step forward, but it is in need of further institutional development over time. We stress two shortcomings. First, the decision-making process does not leave us confident that resolution decisions can be taken swiftly and without much national political interference, which leaves us doubtful that the SRF is 'single' enough. As this is a key condition for a resolution regime to be successful, this is an issue that needs to be monitored carefully and which may well lead to the conclusion that the decision-making process must be modified over time. Second, the SRF is built up relatively slowly, and is relatively small. Considerable phase-in periods for the minimum required eligible liabilities (MREL) for all banks and a lack of clarity of how exceptions to the mandatory bail-in clauses are meant to be established are additional concerns.

It should be noted, however, that in the interim period until the bail-in provisions take effect, the EC's revised State Aid rules, which took effect at the beginning of August 2013, are of particular relevance as they mandate the bail-in of junior creditors (and of course shareholders) before national public funds can be used for bank support (with some exceptions). In the meantime national resolution authorities may of course choose to bail in other creditors, including senior unsecured ones, if they so choose. Some governments, e.g. in Germany, have indicated that they plan for bail-in provisions to take effect earlier than under the BRRD/SRM legislation, perhaps at the beginning of 2015.

6.2.2 The EC State Aid rules

As noted above, the relatively long phase-in periods for bail-in under the current BRRD could leave a big gap until full implementation, particularly for countries that have not already introduced special resolution regimes of their own. But partly to fill that gap and ostensibly to level the playing field between banks in different EU countries and to make bank restructuring more efficient, the European Commission adapted temporary state aid rules, which apply since August 1, 2013.[49] Under these rules, bank owners and junior creditors have to be fully bailed in before any public support can be granted (as before, a restructuring plan for the bank still has to be approved by the EC as well). The bail-in of junior unsecured creditors is meant to imply a conversion into (Common Tier 1) Equity or a write-down of the principal of hybrid capital and subordinated debt holders, after losses are first absorbed by equity, and a stop of all dividend or coupon payments on these instruments. All of this is still meant to be subject to the 'no creditor worse off principle'. Senior debt (interest or principal) are explicitly excluded from these rules.

The rules still leave some room for public funds to come in before shareholder and junior unsecured creditor bail-ins. Thus, public recapitalisation can be temporarily approved before bail-ins if it is 'urgently necessary to avert risks to financial stability', provided that the relevant bank supervisor confirms that the immediate intervention is necessary. Bail-in may also be avoided if the bank has already closed most of the capital gap and the residual amount of state support is small relative the size of the bank balance sheet. Furthermore, guarantees and liquidity support can be approved on a temporary basis (for a maximum of six months) for newly issued senior debt under certain conditions, but not for existing junior or senior debt or for newly issued junior debt (but not senior debt).[50]

[49] See http://europa.eu/rapid/press-release_IP-13-672_en.htm and http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2013:216:0001:0015:EN:PDF. The rules are meant to be applied to all cases for which the EC was notified after the date of 1 August 2013, while for state support notified before then, the old State Aid rules still apply. There is some uncertainty whether the new rules apply to ongoing restructuring cases which require additional support measures.

[50] In principle, these are only available to banks 'without capital shortfalls', but even banks with shortfalls may potentially receive such support temporarily under additional conditions. 'Newly issued' refers to debt offered during the restructuring process.

Even Emergency Liquidity Assistance (ELA) provided by national central banks (NCBs) is subject to the State Aid rules, unless all of a number of conditions are met.[51]

6.2.3 Could bailing in creditors ever be a bad idea

Bailing in creditors makes sense ex-ante by providing incentives for investors to monitor their investments. It also makes sense ex-post by protecting tax-payers. It may be essential if the goal is to restore a banking system that is at least in part insolvent or undercapitalized, and fiscal resources and private capital are insufficiently available.

The main limitations of bail-ins are that they create potentially three types of costs for society.

The first and probably most significant are the incentives for the affected investors that would be the losers in the bail-in game to 'talk their books' and mobilise all political resources at their disposal to try to minimise its incidence and severity and to subordinate the tax payer even to the subordinated unsecured creditors and holders of assorted hybrids. Of course, those investors will often try to dress up their interests in more meritorious guises.

Second, the most commonly used meritorious reason put forward to justify avoiding bail-ins are concerns about financial stability or funding costs, for various reasons:

1. A bail-in of creditors (mostly the way it would be administered) could be perceived as arbitrary or at least unpredictable and that this lack of predictability would persistently weigh on investors' (including depositors') willingness to hold bank assets, and perhaps financial assets in the Eurozone more generally. This concern is meant to apply in particular to senior unsecured debt, i.e. senior unsecured bonds, and perhaps even more so, uninsured deposits (insured deposits are usually assumed to be excluded from bail-ins). Presumably, clear and transparent bail-in rules, impartially enforced, could address these concerns.

   The existence of bail-in provisions would then potentially also durably raise bank funding *costs* (the weighted average cost of capital of debt and equity), which would put these banks at a competitive disadvantage and hurt their ability and/or willingness to lend. In principle, this is not a concern but a certainty: shareholders and unsecured creditors are subordinated to the tax payer, and this raises the cost of funding through equity and bail-innable debt. The disappearance of the tax payers' subsidy will raise the cost of funding. Much of the non-financial corporate sector has been managing reasonably well without these implicit subsidies.

   A related concern would be that allowing unsecured debt to be bailed in is that it would increase incentives to shift towards secured funding. And asset encumbrance makes balance sheets more complex and poses significant challenges for investors to assess banks' riskiness, which may result in higher risk premia for the reduced amount of unsecured debt (and potentially for total funding needs), especially at a time where the overall demand for assets that can be used as collateral is expected to increase.

[51] These conditions are: a) the credit institution is temporarily illiquid but solvent at the moment of the liquidity provision which occurs in exceptional circumstances and is not part of a larger aid package;

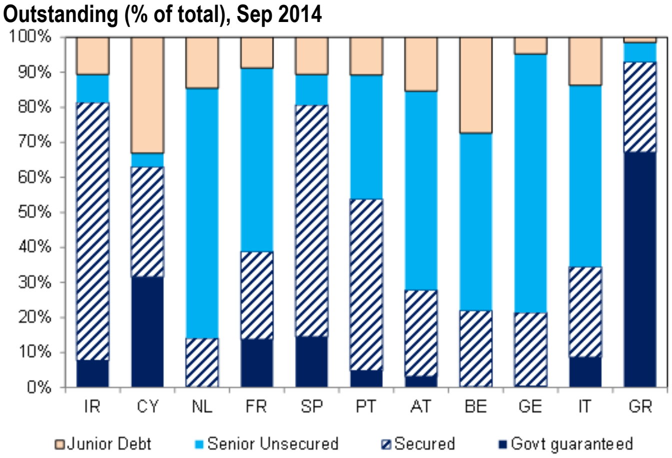
(b) the facility is fully secured by collateral to which appropriate haircuts are applied, in function of its quality and market value;

(c) the central bank charges a penal interest rate to the beneficiary;

(d) the measure is taken at the central bank's own initiative, and in particular is not backed by any counter-guarantee of the State.

2. The arrangements in place when implementing bail-ins may not be adequate to implement them in an orderly way, in particular if investors panic. This concern applies to limitations to how far bail-ins could go (the scale of bail-inable liabilities, or, conversely, the scope of excluded liabilities), and to the adequacy of an effective lender of last resort to replace potentially panic-induced liquidity outflows. For instance, at present there is fairly little junior debt outstanding. According to data available on Bloomberg, the current share of junior bonds in total bank bonds in 15 EA countries generally ranges between 1.5% (Greece) and 15% (Austria), although it is roughly 30% in Belgium, Cyprus, and Malta (see Figure 41). The total amount outstanding of junior bank bonds as Sep 2014 across these 15 countries stands at around €320bn. According to our estimates, junior bank bonds amount to less than 3% of total assets in the 15 countries we consider and below 1% in half of them.[52] In addition, much of that debt is probably issued by the relatively healthier banks. In the longer run, this is not a problem, as all banks will be required to issue sufficient bail-inable debt. It is a problem now, and potentially for the recovery and resolution proceedings following the CA.

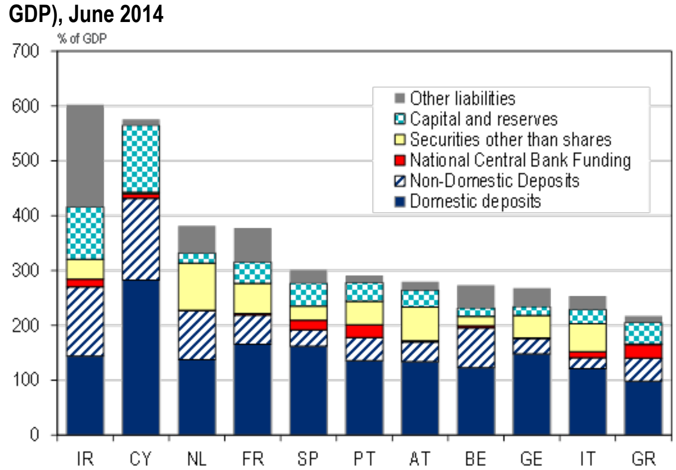
Figure 41. Selected Countries — Composition of MFI Debt Securities Outstanding (% of total), Sep 2014



Note: Composition estimated using bonds outstanding by payment rank type from Bloomberg,

Sources: Bloomberg and Citi Research

Figure 42. Selected Countries — Composition of MFI Liabilities (% of GDP), June 2014



Note: Others include balance sheet item 'remaining liabilities' (i.e. financial derivate position subject to on-balance-sheet recording, margins lodge under derivative contracts, gross amount payable in respect of suspense items, transit items, and foreign exchange transactions, accrued interest payable on deposits, dividends to be paid, provisions representing liabilities against third parties, and other amounts payable) and other external liabilities excluding deposits and securities

Sources: ECB and Citi Research

The financial potential of bailing in senior (unsecured) debt is much larger in most Eurozone countries today. Based on the data available on Bloomberg, the share of senior unsecured bonds alone (excluding other senior unsecured debt, notably deposits) in total assets varies widely by country, but is roughly 10% in Germany, the Netherlands, Italy, and Austria, even though again relatively healthier banks may account for relatively more senior unsecured debt (as weaker banks tend to rely relatively more on secured debt and the ECB). No reliable estimates exist to our knowledge about the amount of uninsured deposits, but these are likely to be much larger, even though their share may fall over time, as the prospect of bailing in uninsured depositors becomes more established. A related concern is the presence of foreign-law bank debt, which may be more difficult to bail.

[52] The countries are Germany, France, Italy, Spain, the Netherlands, Belgium, Austria, Greece, Portugal, Ireland, Cyprus, Luxembourg, Finland, Slovenia, and Malta. The estimate is computed by taking the share of subordinated securities in total debt securities from Bloomberg. Due to numerous measurement issues, the estimates should only be regarded as indicative.

3. It may also be argued that changing bail-in rules without grandfathering existing liabilities would equate to a retroactive change to the rules of the game. Even though this concern applies to a change in the ability to bail-in bonds in general, it applies also to introducing a preference of some or all depositors in the 'capital waterfall' relative to senior unsecured bonds. Indeed, any change in taxes or subsidies amounts to a 'change in the rules of the game', which will be accompanied by gains and losses. A related concern is that some unknown but potentially significant share of the debt that could be affected was bought by unsophisticated investors, in particular by retail investors. More generally, without grandfathering, the change in the legal treatment of the bonds could of course be subject to legal challenge.

In our view, many of the concerns about bailing in creditors seem overdone, misleading, or both.

The adequacy of the bail-in arrangements is mostly a choice variable. The bail-in process should be as transparent, predictable and based on sound principles as possible, while retaining sufficient flexibility to respond to the specific circumstances. The regimes should spell out relatively clearly the triggers and the process of bail-ins, including the seniority ranking. The experience in Cyprus was a disappointing one in that regard, as a large number of (mostly undisclosed) exemptions made a mockery of the idea of the appropriateness of the bail-in effort. Limiting the degree of seemingly arbitrary discretion probably requires some further statutory safeguards.

Moreover, the ECB is perfectly capable of working as an efficient and effective lender of last resort and market maker of last resort to respond to market panics. When there is a credible lender of last resort for banks no solvent bank can be illiquid and unable to access the capital markets. The Eurosystem can handle it. If the ECB does its job as LLR and MMLR, there will be no banks that are viable yet need state aid to boost their capital base. Interestingly, the ECB itself does seem to have warmed to the idea of bail-in of even senior unsecured debt in its opinion on the Single Resolution Mechanism which supports applying the bail-in provisions of the BRRD/SRM from January 2015, noting that "Bail-in is considered to already be priced-in to a large extent, so the impact on funding is expected to be marginal. Furthermore, having the bail-in tool in place would contribute towards legal certainty, consistency and predictability, thus avoiding ad hoc solutions."[53]

As regards limits to the amount of bail-inable debt outstanding, they suggest that i) the scope of 'excluded' liabilities should in principle be as small as practical (and should not include senior unsecured bonds), and ii) that there should be a domestic or mutualised fiscal backstop, should the bail-inable resources still not suffice to safeguard the essential functionality of the banking system. For those banks that fall short of the bail-inable debt requirements, the BRRD/SRM will force them to increase their unsecured liabilities (since secured ones cannot be bailed-in). This could increase overall funding costs temporarily if needed to be done in a short period of time.

Regarding the governing law of existing bonds, bonds issued under foreign law can clearly raise additional headaches. They need not be fatal, however, if there is sufficient other bail-inable debt. In addition, it is worth noting that since the change in resolution regimes is an EU-level initiative, at least all debt issued under EU law (including London law) could be involved.

[53] http://www.ecb.europa.eu/ecb/legal/1353/1330/html/index.en.html?skey=CON/2013/76

Even though we don't agree with the ECB that bail-in risk is priced properly in the euro area (for banks or for periphery sovereigns), we agree that, once the solvency-restoring actions, including bail-ins have taken place and the banking sector has been restored to balance sheet health, the impact on the cost and availability of bank funding will be limited. Even though we are well aware that few of the assumptions of the Modigliani-Miller theorem on the irrelevance of capital structure for the weighted average cost of capital hold in practice, we are also not convinced that higher levels of capital or a greater share of bail-inable capital would raise bank funding costs, except in that they reduced the present implicit and explicit subsidies provided by the taxpayer. Similarly, we doubt they would hurt their willingness to lend.

We agree that changing the rules of the game is not ideal. The introduction of the 'no creditor worse off principle' should be adhered to. The NCWO principle suggests that creditors should in a restructuring not receive less in economic terms than what their instrument would have been worth if no State aid were to be granted. This should also be helpful in highlighting to creditors that their alternative would often be liquidation. That should not be too hard, as their instruments would most of the time have been worth nothing absent state aid.

We are therefore mostly concerned with the potential financial stability risks associated with the transition to the new bailout regime. In particular, remedial actions following the CA will be taken according to national arrangements (subject to State Aid rules), as the/SRM's bail-in provisions have not yet taken effect. At the very least, resolving a bank with significant cross-border operations in particular would remain very difficult in the absence of an EU mechanism. These concerns suggest to us that workable resolution arrangements should be built up at the fastest speed possible.

6.3 Common Backstops

The necessity for common fiscal backstops would be greatly reduced once effective bail-in rules have been established, including a sufficient share of easily bail-inable bank debt. But it is probably a heroic assumption that banking crises can be resolved without any direct fiscal contribution. The significance of a fiscal backstop is greater in the transition to a more efficient recovery and resolution regime, when bail-in regimes may not yet have been fully established and tested and when privately funded resolution funds may not be large enough. Even in steady-state, privately or bank-funded resolution funds are unlikely to be able to cope with a systemic crisis, affecting most or even all banks.

In June 2012, the EU Council agreed that the ESM would be given the authority and instruments to directly recapitalize EA banks once the SSM was effective, and the Deposit guarantee system (DGS) directive and the BRRD were agreed. This agreement was widely interpreted to imply significant fiscal mutualisation of banking sector losses in the future. That interpretation was never particularly plausible, not least because of the small size of the ESM (€500bn for sovereign liquidity and banking sector support).

The discussion on the constraints to introducing (and in the future using) the ESM direct bank recap instrument at first mainly focused on the desire to reduce the exposure of the ESM to so-called 'legacy losses', i.e. losses that had already been incurred before single supervision had taken over. This is why the agreement to give the ESM a direct recapitalization instrument were linked to the completion of a 'comprehensive assessment, including a balance sheet assessment' of EA banks. Once the assessment was complete, the fiscal elements of future losses could be mutualized in principle.

However, in the meantime it has become clear that significant constraints on the use of the ESM are meant to apply not only during the transition, but also in the steady state, i.e. long after the legacy exposures had been digested. According to the latest European agreement, the ESM will have a maximum of €60bn available for direct bank recapitalization, equivalent to a measly 0.5% of EA MFI assets.[54] The precise conditions for the ESM direct bank recapitalisation are a long list, including i) a bail-in of private creditors (at least junior debt, but quite possibly also senior unsecured debt according to the final BRRD/SRM rules, (ii) a 'systemically important' nature of the bank for the EA or one member country, iii) the inability of the member country to provide needed the support on its own, and iv) a common equity tier 1 ratio of 4.5% (and a need for the local government to contribute 20% of the capital support thereafter).

Figure 43. Euro Area – Schedule for gradual pooling of Single Resolution Fund Contributions, 2016-2024

	Step 1: limit for use of 'concerned compartments'	Step 2: limit for use of mutualisation of all compartments	Step 3: back to concerned compartments
2016	100%	40%	
2017	60%	60%	
2018	40%	66.7%	if there is still need for further funds the concerned national compartments will have to use all the remaining resources
2019	33.3%	73.4%	
2020	26.6%	80.1%	
2021	19.9%	86.6%	
2022	13.2%	93.5%	
2023	6.5%	100%	
2024	0%	100%	

Note: Concerned compartments are the compartments of the host and home country of the failing bank.
Source: Citi Research

The truly single part of the Single Resolution Fund (SRF) is also small and even then it will take years to get there. The current rules for the SRF are that the national contributions (or compartments) will progressively be pooled. Total contributions are meant to be 1% of covered deposits, to be paid by private banks at a rate of 0.125% of covered deposits per year for eight years from 2016 (so it will be filled by 2024). Initially, the national contributions will remain mostly national. But each year, the share of the national contribution that will be available to other countries increases and the speed of pooling was increased compared to earlier drafts of the SRF. According to the final agreement, now already in year 2 (i.e. 2017), 60% of the funds of other member countries are in principle available before the compartments of the 'concerned countries' (the home and host countries of the failed institution) are exhausted (Figure 43).

6.4 Deposit insurance

The December 2012 EU Council also called on legislators to agree on an EU Deposit Guaranteed System (DGS) Directive by June 2013 and a new DGS directive was indeed adopted on the same day as the BRRD. However, it should be noted that the main ambition of the DGS is to harmonise deposit guarantees across EU countries, with the only hint at potential mutualisation consistent of the inclusion of the option for deposit guarantee funds to lend to each other 'voluntarily'. The DGS directive includes requirements for deposit guarantee funds in individual EU countries regarding the type of deposits to be protected (deposits of individual and non-financial entreprises up €100k per depositor per bank), the minimum size for the deposit guarantee fund (at least 0.8% of covered deposits), how quickly the

[54] See http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ecofin/137569.pdf

deposit fund needs to pay out in response to claims (within 7 days once the funds are fully filled in 2024), among other things. The DGS directive is therefore helpful, but not particularly relevant from a financial stability perspective. At the same time, the lack of a mutualised DGS is not a fatal flaw in the design of banking union, as we stressed in Section 3.

7. What to do about the excessive sovereign exposure of EA banks?

As we noted in Section 4, the existence of links or two-way feedback loops between Eurozone sovereigns and banks is one of the major underlying financial stability risks and one of the root causes of financial fragmentation. It also is an issue that is not addressed effectively in the Comprehensive Assessment. [55] It is also a prima facie rather intractable problem. Including loans, bank exposure to the domestic general government (GG) is now 17% of total assets in Italy, 13% in Spain, and 8% in Portugal, and represents multiples of regulatory capital. Moral suasion and financial repression by national authorities have contributed to the banks' appetite for own sovereign debt, but very favourable regulatory treatment has provided a nice carrot, too — zero sovereign risk weights for own sovereign debt under the standardised approach of the national transpositions of Basel III, the lack of exposure or concentration limits and favourable treatment for sovereign debt in the liquidity coverage ratios (LCR), as well as a nice carry pick-up due to the availability of cheap Eurosystem financing. Further incentives for troubled banks in countries with troubled sovereigns to maintain or even increase their exposure to the own sovereign continue to be created. A very recent example is the relaxation on October 15, 2015 of collateral standards (lower haircuts) granted by the ECB to Greek banks offering sovereign or sovereign-guaranteed debt as collateral in repos.

So what could be done about the excessive sovereign exposure of banks in some EA countries? In our view, the solution will probably involve a combination of four aspects:

1. To encourage cross-border banking, including cross-border mergers and take-overs.

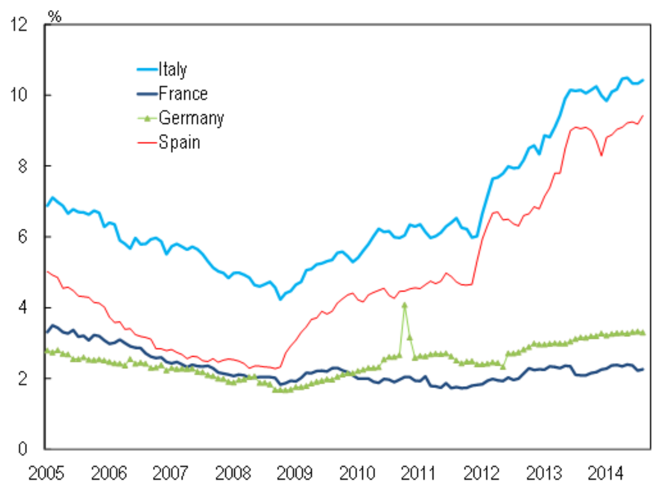
2. To end the regulatory subsidies for own sovereign exposure by applying the same criteria for risk-weighting, concentration/ exposure limits, LCR eligibility and haircuts to sovereign debt instruments as to private debt instruments.

3. To Europeanise financial repression

4. To have orderly sovereign debt restructuring of insolvent sovereigns

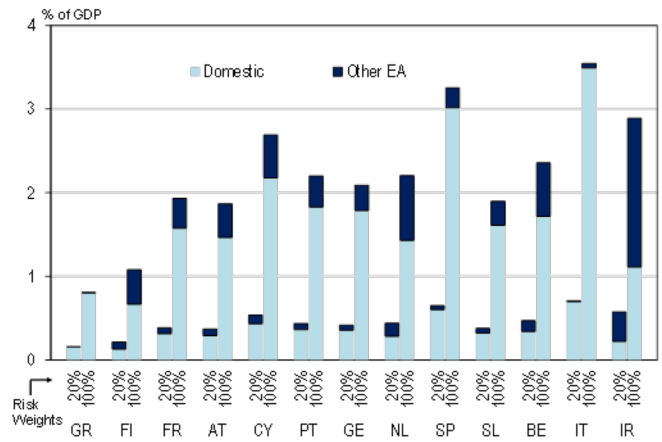
[55] See also Weidmann, J, "Stop encouraging banks to buy government debt", Financial Times, 30 September 2013. The preferential regulatory treatment of sovereign exposure may even be extended, see "Capital requirements for government bonds not on Basel III agenda", Reuters, 9 October 2013 and "Central Bank of Ireland diverges from Basel III on AFS bonds", Risk.net, 9 October 2013.

Figure 44. Selected Euro Area Countries — MFI Holdings of Government Debt Securities (% of assets), 2005 - Aug 2014



Note: Monetary Financial Institutions (MFI)
Sources: ECB and Citi Research

Figure 45. Selected Countries — Implied Capital Needs from Applying Risk Weight for Government Exposure (% of GDP), Aug 2014



Note: Applying an 8% target capital ratio. Government exposure includes loans and securities on MFI balance sheets as of August 2014.
Sources: ECB and Citi Research

The first option means in part that banks as national champions become a thing of the past for the Eurozone. We suspect that the SSM will shift some of the incentives and provide some political tailwind to facilitate cross-border mergers, which could materially loosen the links between domestic banks and sovereigns (and also help reap some economies of scale and scope). There are, of course, some national informational asymmetries to overcome, but we doubt that these have been the major reason behind the lack of cross-border banking in the Eurozone. However, it should be noted that the number of cross-border mergers and acquisitions in the Eurozone has continued to decline sharply in recent years, as highlighted in the recent ECB Banking Structures Report.[56]

The second ingredient, ending regulatory and quasi-regulatory subsidies for sovereigns, such as the zero effective risk-weights, no concentration/exposure limits, excessively generous treatment of own sovereign debt under the Basel liquidity coverage rules and the ECB's repo funding access criteria, seems politically even more difficult. This is not because the costs of such actions would necessarily be prohibitive for banks and sovereigns. The capital implications of applying positive risk weights to the sovereign exposure may be relatively contained. For instance, assuming an 8% capital ratio, with 10% of assets in exposure to governments, a 20% risk weight for government exposures implies additional capital of less than 0.2% of assets (or, with banking system assets of roughly 300% of GDP, roughly 0.6% of GDP). Even for countries with bank higher exposure to governments, such as Italy or Spain, additional capital needs would seem relatively manageable: 0.3% of assets and 0.7% of GDP for Italy (1.4% and 3.5% under a 100% risk weight), and 0.2% of assets and 0.7% of GDP for Spain (1% and 3.1% under a 100% risk weight). Of course, higher risk weights would change this calculus, but even a 100% risk weight does not seem fatal (Figure 45).[57]

[56] See ECB (2014), "Banking Structures Report", October 2014, https://www.ecb.europa.eu/pub/pdf/other/bankingstructuresreport201410.en.pdf

[57] Incidentally, corporate loan exposures under Basel II and Basel III carry a 100% risk weight.

A 20% valuation haircut under a stressed scenario could have much larger implications, with additional capital needs worth 2% of assets (6% of GDP), in the case of a government exposure of 10% of assets and a bank asset/GDP ratio of 300%. Concentration limits on the other hand, need not have any direct capital implications for banks, even though they might, if they were introduced unexpectedly and quickly, induce fire sales of government bonds, which could push down their value and lead to material losses. The quantitative implications of the change in regulatory treatment of sovereign exposure on sovereign funding costs are anyone's guess, although qualitatively it must increase sovereign funding costs.

The third option, Europeanising financial repression (that is, putting pressure on banks throughout the euro area to hold larger amounts than they would hold voluntarily, not just of their own sovereign debt but of the sovereign debt of any of the euro area member states), is clearly a second-best solution, as it will continue and to some extent even deepen the links between sovereigns and banks. But by reducing the links between national sovereigns and banks, it is likely to reduce financial fragmentation, which is one of the key centrifugal forces in the Eurozone.

The fourth option is to remove any material doubts about the solvency of Eurozone sovereigns. In principle, there can be many ways to achieve that (including unanticipated inflation, high real and nominal GDP growth, and austerity), but we struggle to think about any realistic alternatives to widespread debt restructuring for the most fiscally challenged euro area sovereigns. But of course sovereign debt restructuring comes with its own risks and costs and it would be foolish to attempt it (given the exposure of the banks to the sovereigns) without an effective bank resolution regime in place. In any case, widespread opposition in the euro area political, official, and central banking communities to sovereign debt restructuring in any euro area member state makes orderly sovereign debt restructuring in the Eurozone in the foreseeable future an unlikely prospect, in our view.

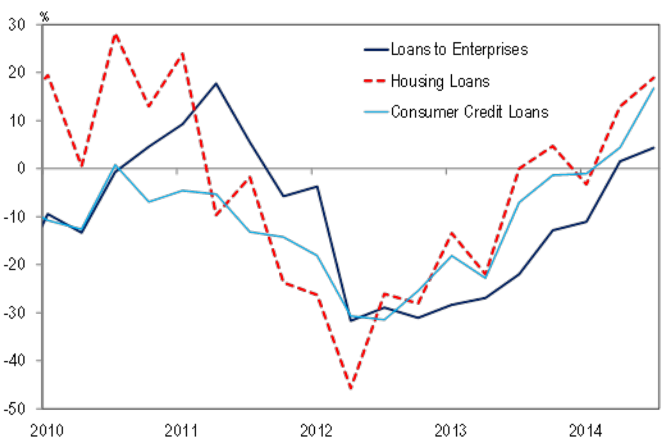
The political hurdles to seriously tackling the sovereign-bank two-way loop still look very high to us. We therefore do not expect any major progress in reducing the strong two-way link between sovereigns and banks in the Eurozone in the foreseeable future. This is despite the fact that the technical hurdles seem relatively low. However, that does not mean that there will not be any progress. For example, the incoming European Commission is likely to look into the issue of positive risk weights for sovereign exposure and into concentration limits, but it remains to be seen whether there will be much appetite for reform along the lines we outline.

8. Will banks support the Eurozone recovery?

There are two relevant dimensions to the question of whether banks can support growth in the Eurozone economy: the near-term and the medium-to-long-term.

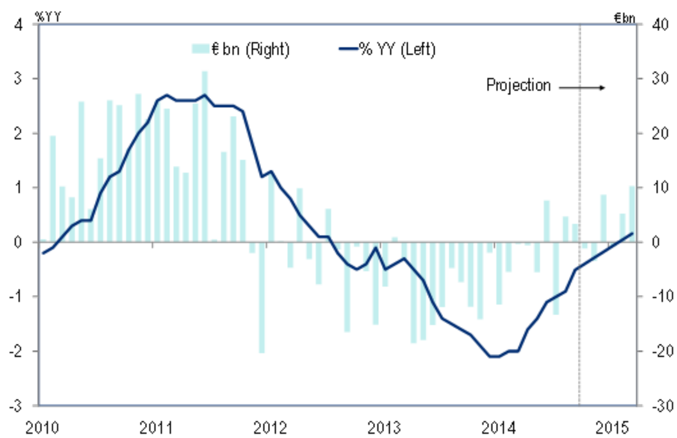
For the near-term outlook, one important question is whether the end of the CA has any hope of boosting financial conditions in the Eurozone soon. In our view, the answer is yes. As noted above, common sense supported by some empirical evidence suggests that the CA had procyclical effects and made banks at least temporarily more hesitant to lend. This effect should reverse, boosted by the end of the CA, in combination with the ECB's recently announced TLTRO and private asset purchases. In fact, in recent months we have already seen a moderation in the rates of credit contraction, as well as some signs of easing lending standards.[58] Together with an increase in credit demand, these signs suggest to us that NFC bank credit growth could turn positive at the beginning of 2015.[59] After a long period of subdued or even negative credit growth following, first, the global financial crisis and then the Eurozone crisis, credit growth would therefore start to pick up again. The lagged nature of a recovery in credit growth is in line with prior episodes of banking crises, when eventual recoveries have tended to be mostly 'creditless' (even though the recent IMF Global Financial Stability Report notes that lending in the Eurozone has underperformed the average experience following financial crises).[60]

Figure 46. EA – Bank Lending Survey Demand for Credit (% balance), 2010- 2014



Note: Demand for credit over past three months.
Sources: ECB and Citi Research

Figure 47. EA – Lending Flows to Private Non-Financial Sector (€ bn and %YY), 2010 – 2015F



Note: Flows adjusted by securitization and sales. Projection taking average YY change in monthly lending flows over previous six months.
Sources: ECB and Citi Research

[58] See Euro Area: Lending Survey Records Improving Credit Demand

[59] See Euro Area: NFC Net Borrowing Falling More Slowly and Euro Area - Eurozone Credit Crunch Slowly Ending

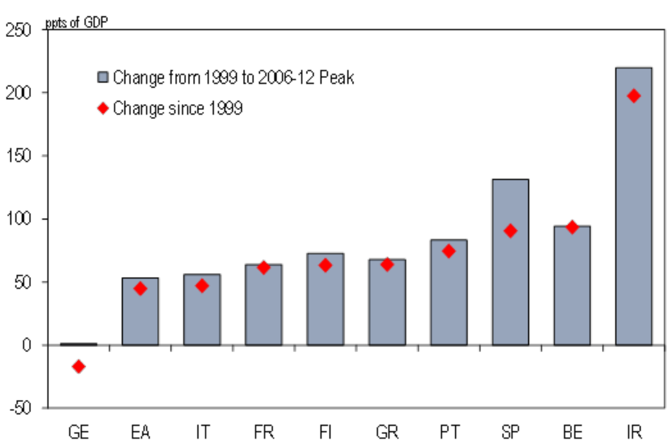
[60] See e.g. https://www.ecb.europa.eu/pub/pdf/other/art1_mb201202en_pp69-85en.pdf and IMF (2014), "Global Financial Stability Report: Risk Taking, Liquidity, and Shadow Banking", October 2014, https://www.imf.org/external/pubs/ft/gfsr/2014/02/pdf/text.pdf

The medium-term picture for financial conditions in the Eurozone remains cloudy. This is partly because much remains to be done to escape the halfway house of a single supervisor and eighteen (and from 2015 on nineteen) national legal and regulatory regimes for banks. But there are several other reasons why the financial sector in the Eurozone might not be able to support vigorous growth. For instance, the IMF's recent Global Financial Stability Report (GFSR) noted that Eurozone banks are by and large not profitable enough to support strong growth in lending, even if there were demand. It shows that the return on assets for Eurozone banks is perhaps 2%, compared to around or above 10% for banks in the rest of Europe, the US or Asia-Pacific (Figure 49). Regulation and new legal requirements are in part to blame, but so are the fact that there are still too many banks in the Eurozone and that they have not yet adapted their business models to the post GFC world in the way many global banks have. Consolidation in the banking sector, including, hopefully, cross-border consolidation seems to be one of the ways to address the lack of profitability of Eurozone banks.

In addition, private non-financial sector debt remains high in a number of sectors and countries in the Eurozone and continues to weigh on both willingness to lend and on credit demand (Figure 48). For financial conditions to truly normalise and to converge between countries, some degree of economic convergence is in any case probably needed. The October 2013 IMF GFSR notes that persistent non-bank private debt overhang is a constraint on lending in many EA countries. For instance, it notes that firms with an interest coverage ratio (EBIT/interest expense) account for 50% of all corporate debt in Portugal, 40% in Spain and 30% in Italy.

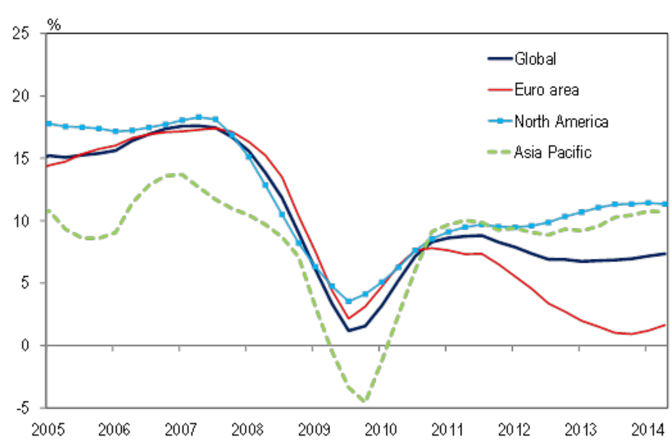
In addition to banking sector reform and consolidation, widespread deleveraging and debt restructuring are probably also needed in the non-financial private sector. A prerequisite for such action is the improvement of the insolvency procedures for households and businesses in many countries. Much of that can be done at the national level, but even more desirable would be a form of a Eurozone or EU-wide Chapter 11 and equivalent household insolvency procedures. There is some hope that the CA and the associated recapitalization of banks will facilitate the process of writing down or equitizing the debt of excessively indebted Eurozone households or businesses. But for the time being, there are few signs of more active writedowns of private sector debt, as far as we are aware.

Figure 48. Selected Countries – Change in Private Non-Financial Sector Gross Debt (pp of GDP), 1999 – Q1 2014



Note: Private non-financial sector includes households and non-financial corporations. For Greece and Ireland 1999 corresponds to 2001.
Sources: Eurostat, National Sources, and Citi Research

Figure 49. Selected Regions – Bank Return on Equity (%), 2005 – Q2 2014



Note: Shows four-quarter asset-weighted averages. Based on a sample of about 300 large banks
Sources: IMF Global Financial Stability Report October 2014 and Citi Research

9. Conclusion

There are some that see the fundamental design flaw of the Eurozone in its lack of fiscal union. In our view, the key missing ingredients are, first, banking union – the combination of a single supervisor, a single resolution mechanism (with recapitalization back-up) and a lender of last resort for banks, and, second, an orderly sovereign debt restructuring mechanism and a lender of last resort for sovereigns. Both missing ingredients require fiscal backstops. The minimal necessary fiscal backstops, however, fall well short of fiscal union or fiscal federalism.

The first of these fundamental design flaws is being mitigated. Like many late additions to an existing structure, banking union will probably not win any design accolades. But even though it does not look pretty, it may still work. In particular, the introduction of effective and wide-ranging tools to bail in the unsecured creditors of failing banks before raiding the pockets of taxpayers in the BRRD and SRM is crucial, in our view, both to minimize moral hazard and lower the risk and severity of future banking crises, and to retain (or perhaps regain) popular political support for the European Union and the Economic and Monetary Union. Without banking union, we believe the risk of a Eurozone sovereign defaulting after yet another series of taxpayer-funded bank bailouts or the risk of a substantial public backlash would be very material. The SSM has every hope of becoming a more effective supervisor than the 18 (soon 19) national supervisors it replaces, and the SSM and SRM together could do much to contain and reduce the extreme degree of financial fragmentation that is threatening the Eurozone. The Comprehensive Assessment (the results of which will be published on October 26) will be a key step on the road towards successful banking union, in our view, and it looks to meet the minimum conditions for success (even though the range of potential capital shortfalls still remains quite high).

Of course, if centralisation by itself were the solution to all problems, the Soviet Union would be the role model for efficiency and effective economic governance. The amount of bureaucracy that appears to be implied by the decision-making mechanisms of the SSM and SRM is an issue, and bureaucracies have a tendency to focus inward rather than face the tasks they were created to address. Therein lies one of the many risks and challenges banking union is still subject to: it is incomplete, it is untested and it is complicated. It also urgently needs a Euro area sovereign debt restructuring mechanism – something there is no sign of as yet.

The challenges remain considerable, but if banking union meets these challenges, then October 26, 2014 (the day of the publication of the Comprehensive Assessment), November 4 (when the SSM takes over as supervisor) and January 1, 2015 and 2016 (when the SRM and its bail-in provisions, respectively, take effect) are as significant dates for the Eurozone as 1 January 1999, when the euro was formally introduced.

Appendix A-1

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