RBS

The Revolver

European banks: Still too big to fail

Europe's banks are stronger but still too large, and sovereigns remain vulnerable to bank risk. Despite €3.5tn asset reduction since 2012, we estimate Eurozone banks must shrink by a further €1.8tn, and that the largest banks must raise at least €58.5bn of capital to comply with Basel III. But even with additional capital, banks will still be too big to fail. To stand on their own feet in a crisis, we estimate banks need a leverage ratio of 5.8% rather than the current 3%. This corresponds to as much as €492bn of gross additional capital. Alternatively, Europe needs larger backstops: the current €55bn SRM fund is a step in the right direction, but still insufficient. Rising capital needs mean large banks will issue €28-35bn of contingent capital this year, bringing the market to €100bn. But bank capital investors must be mindful about what they buy: we find the fast-growing coco market is mispricing conversion risk. The sweet spot in the capital structure remains LT2 debt. T1 and coco investors should be very selective.

Too big to fail has not gone away. Even if banks met all Basel III standards today, they would still be too big to fail. Regulators and investors have so far measured bank capital based on risk-weights. This works only in theory. In practice, large banks have improved their capital ratios over the past year by optimising risk calculations. In some cases, risk-weighted assets are as low as 20%. In this case, a 10% capital ratio equates to €2 of capital for €100 of assets: too low, especially for a systemic institution. So, if capital levels are high relative to risk-weight measures, they are still too low in absolute terms, especially considering that European banks are still 3.2x the size of the economy, according to the ECB. But the cost of a future financial crisis on sovereigns and taxpayers will depend on the size of Europe's banking system, as well as the banks' initial capital, the available backstops, and how much money can be recouped by bailing in shareholders and bondholders:

Crisis cost = [bank losses – (capital + bail-in + backstops)] x size of system

Even with the new capital rules and Euro-wide backstops, the equation doesn't balance: a financial crisis would still hurt European sovereigns.

A higher leverage ratio could reduce the potential cost of future crises. Given European and national backstops and bail-in regulation, we estimate banks would need a leverage ratio of around 5.8% to ensure sovereigns do not need to pay in a banking crisis like the current one. This would equate to €492bn of gross Tier 1 capital needs, for large European banks. This is clearly a high bar, and an order of magnitude higher than current regulatory requirements. But we think regulators should continue to focus on absolute capital levels, as the UK, Swiss and US authorities are proposing.

The coco market will grow to fill the gap. We estimate the 19 largest banks in our analysis will raise €28-35bn of AT1 capital in 2014 to comply with leverage ratio requirements. Tier 2 capital is the new sweet spot in financial debt, as the growing buffer of equity and AT1 debt will make it safer. We remain long LT2 debt.

But be careful what you buy: cocos are mis-priced. Our analysis on outstanding coco bonds shows investors are only pricing in the risk of coupon deferral, but not the risk of conversion and type of conversion mechanism. This is consistent with recent concerns expressed by the Bank of England and other regulators.

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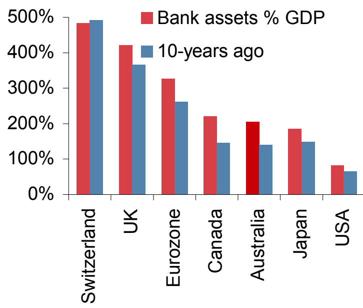
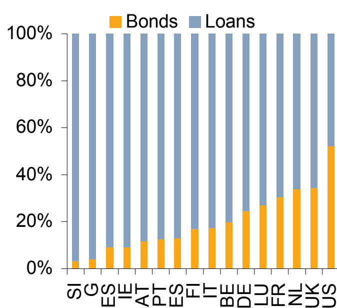
European banks are still large
Bank assets, % GDP



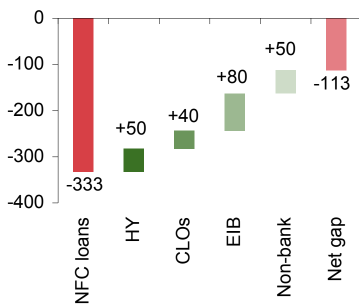
Source: RBS Credit Strategy

Most credit is from bank loans
Total credit, %



Source: RBS Credit Strategy, Bloomberg, SIFMA, Fed, BoE, ECB

Non-bank loans: renewable credit
Potential amounts in non-bank lending vs fall in bank loans, €bn



Source: RBS Credit Strategy, ECB

Europe needs more renewable credit

Europe's economy relies too much on loans. European firms borrow almost 80% of their funds from banks. In the periphery, where over 95% of firms are SMEs, this goes up to 90%. At the same time, European banks are the largest in the world, at 3.2x GDP, as per ECB data. If we think about the banking system as an energy grid powering the economy with credit, then Europe's energy comes almost exclusively from one source: banks. In energy markets, these are comparable to coal or nuclear power plants – if something goes wrong, the repercussions are serious, the problems are hard to clean up and the country ends up with a shortage of power for a long time. Because of its reliance on a large and interconnected banking system, and lack of other sources of funding, Europe's credit markets remain vulnerable.

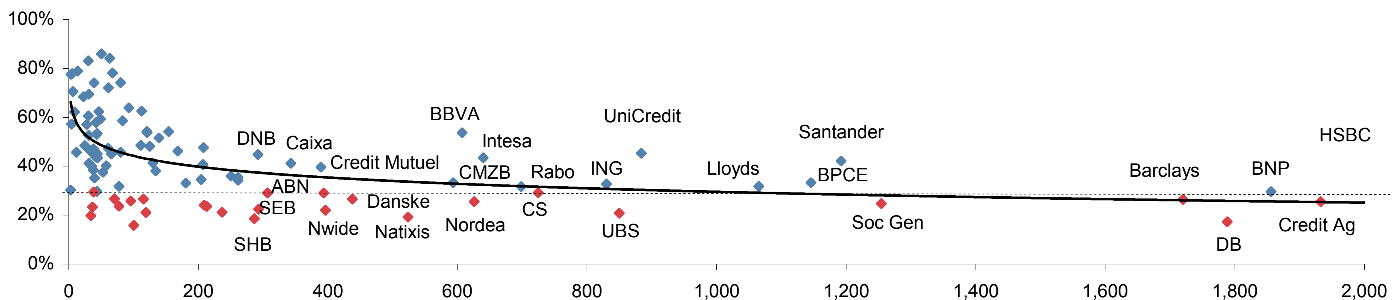
Europe needs smaller banks, more capital and more "renewable energy". Other sources of funding can help to reduce Europe's reliance on loans and to fill the lending gap left by bank deleveraging (now equal to €333bn of loans to non-financial firms, as shown on the left). As ECB board member Yves Mersch explained last year, growth in bond funding, securitisations, EIB programmes and non-bank lending can over time offset falling bank credit. These are the credit equivalents of renewable energy, as we discussed in our 2014 Outlook.

In the meantime, regulators will have to fix banks. The process of disintermediation out of bank funding will be slow, and in the meantime Europe will have to build a stronger financial system. Banks have already made some progress. According to EBA's 2013 Transparency Exercise, 64 EU banks increased Core Tier 1 capital by €80bn and reduced RWAs by €800bn in total between December 2011 and June 2013. In addition, more transparency from the AQR and stress tests is bringing back investors and enabling banks to raise more capital – as the cases of bank reform in Spain and Ireland have already shown. Yet, the cost of a hypothetical crisis would still fall on sovereigns: banks still need to raise more capital and cut more assets to be sustainable, in our view. The road to deleveraging and recapitalisations will be long.

But has too big to fail been solved? We think not. Banks are too large, and the available levels of bank capital, bail-in tools and planned public backstops are still not enough to insulate sovereigns from a serious future crisis, in our view. Investors should be careful too – the market does not seem to be correctly factoring conversion risks and mechanisms into the prices of cocos.

Till then, large banks remain too big to fail. We find that banks' own capital, bail-in and planned backstops are not enough to absorb potential losses. Using historical losses on troubled banks in the US and Europe during the past financial crisis, we estimate the net burden on sovereigns from bank losses could be between 5-15% in a chronic loss scenario where all banks suffer a moderate loss, and between 1-10% in a systemic scenario where the two largest banks suffer a severe loss.

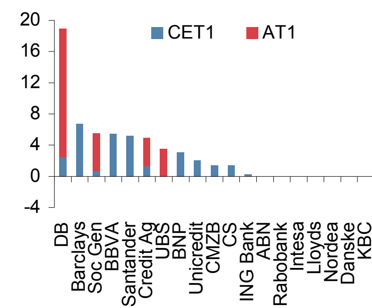
Capitalism without capital: large banks have relied on risk optimisation to keep RWAs low, but may need more capital
RWA as a % of total assets vs total assets, €bn



Source: RBS Credit Strategy

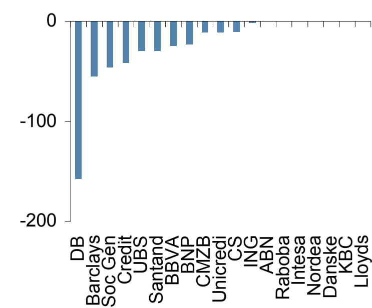
Large banks need €58.5bn capital

Leverage% drives capital needs
Capital needed, €bn



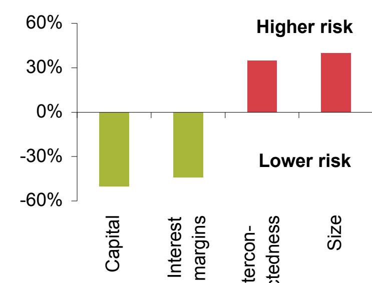
Source: RBS Credit Strategy estimates

Low lev % means more asset cuts
Deleveraging needed, €bn



Source: RBS Credit Strategy estimates

What makes banks safe?
Correlation with financial stress



Source: RBS Credit Strategy, IMF

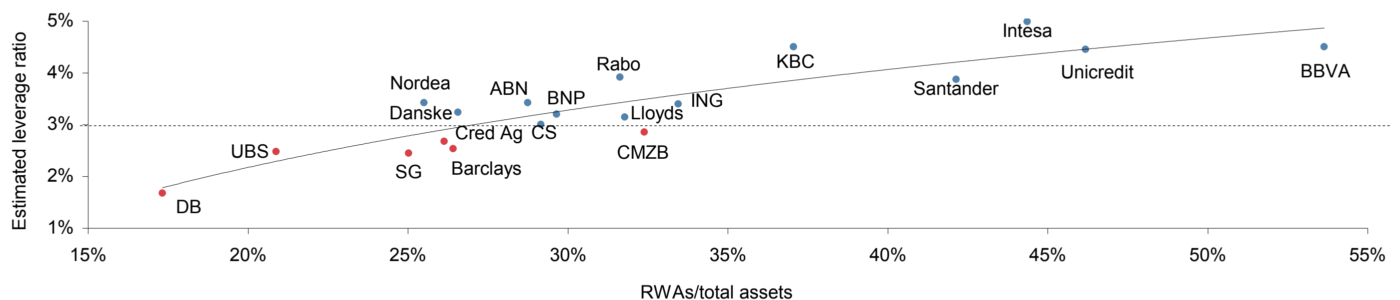
We estimate large banks will need €58.5bn of gross Tier 1 capital over the next three years: €30bn of Common Equity Tier 1 (CET1) and €28.5bn of Additional Tier 1 (AT1) capital. They would also need to reduce assets by €440bn. Overall, Eurozone banks would need to shrink assets by €1.8tn. We think large banks will deleverage mostly by raising capital (80%) and in small part cutting assets (20%). The capital raising and deleveraging needs are mostly concentrated among investment banks: Deutsche Bank and Barclays for example, which we have been underweight.

This is higher than our previous analysis as we have added more banks, and expect them to hold an additional capital buffer of 2.5% of RWAs over and above the minimum CET1 requirements (we assumed 1.5% previously). We still assume banks will target a 3% leverage ratio, the minimum Basel III requirement. We define the leverage ratio as CET1 capital / total assets to use a consistent definition across banks. For further details, please see the table on the next page and Appendix.

Banks with low RWAs relative to total assets need more CET1 and AT1 capital. Banks with low proportion of RWAs to total assets (low RWA intensity) tend to have low leverage ratios. This is because their balance sheets are large relative to the capital they hold. Deutsche Bank, Societe Generale and Credit Agricole have low RWA intensity, and need more CET1 and AT1 capital as per our analysis. UBS needs more AT1 capital to comply with leverage ratio requirements. Barclays, BBVA, Santander, BNP Paribas, UniCredit, Commerzbank, Credit Suisse and ING Bank need more CET1 capital. We have assumed banks will aim to raise capital ratios to 2.5% above their minimum requirements: the 4.5% minimum CET1 + 2.5% capital conservation buffer + their additional G-Sifi buffer (1-2.5%). Banks may hold this extra 2.5% if they want to be extra conservative, or if national regulators choose to activate the counter-cyclical buffer. According to our analysis ABN, Rabobank, Intesa, Lloyds, Nordea, Danske and KBC do not need any additional capital.

Some banks can fill potential capital shortfalls through earnings only – but most will raise more capital. BNP and Santander can earn their potential capital shortfalls of €3bn and €5.2bn in estimated 1 and 2.8 years respectively. However Deutsche Bank, Barclays, UBS and Soc Gen, for example, would need much longer than that to meet their capital needs, as per our analysis. Therefore it is likely they will raise additional capital from investors, in our view. To calculate banks' ability to raise capital through earnings, we have taken the average net income available to shareholders in 2011 and 2012 and assumed a dividend payout ratio of 50%. While earnings in 2011 and 2012 were depressed by loan losses and poor trading results for many banks, we still think they will be too weak to be the sole source of capital generation, even if they did improve in the coming years.

Banks with low proportion of RWAs to total assets often have low leverage ratios, and need more capital
Leverage ratio is estimated as CET1 capital / total assets. Banks in red are those with estimated leverage ratios <3% and need more capital



Source: RBS credit strategy estimates, company filings. Estimated leverage ratio varies from the company's disclosed leverage ratio which can be found here

Large European banks potentially need €58.5bn gross capital, shed assets by €440bn

Banks need to raise more CET1 and AT1 capital, and shed assets to comply with 3% leverage ratio requirements
Figures in €bn. Capital ratios are % RWAs

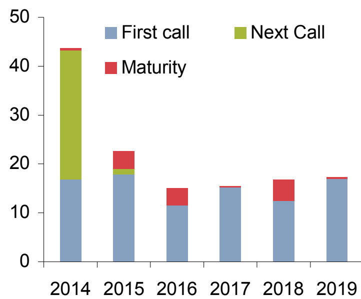
	Disclosed CET1 ratio	Target CET1*	Capital ratio shortfall	Estimated CET1 capital	Estimated leverage ratio	Disclosed leverage ratio	Excess of Lev. ratio over 3%	How can banks meet their capital and leverage ratio shortfalls? 1.Tier 1 capital needs	CET1 shortfall	AT1 shortfall	RWAs	2. RWA reduction needed	Total assets	3. Asset reduction needed	4. Earnings (years needed)
BNP	10.8%	11.5%	-0.7%	59.4	3.2%	3.4%	0.2%	3.1	3.1	-	550.0	- 6.7	1,855.6	- 22.6	1.0
Soc Gen	9.9%	10.5%	-0.6%	30.7	2.4%	3.3%	-0.6%	5.5	0.7	4.9	310.4	- 11.4	1,254.4	- 46.0	7.0
Credit Ag Group	10.5%	11.0%	-0.5%	51.8	2.7%	3.5%	-0.3%	5.0	1.3	3.7	493.0	- 10.5	1,932.1	- 41.3	N/A
ABN	11.8%	9.5%	0.0%	13.5	3.4%	3.1%	0.4%	-	-	-	114.4	-	394.0	-	-
ING Bank	10.4%	10.5%	-0.1%	28.2	3.4%	3.9%	0.4%	0.2	0.2	- 0.0	271.2	- 0.5	829.9	- 1.6	0.1
Rabobank	12.4%	9.5%	0.0%	27.4	3.9%	4.3%	0.9%	-	-	-	220.8	-	698.4	-	-
Intesa	11.5%	9.5%	0.0%	32.0	5.0%	N/A	2.0%	-	-	-	277.9	-	639.8	-	-
Unicredit	9.9%	10.5%	-0.6%	39.4	4.5%	N/A	1.5%	2.0	2.0	-	399.7	- 4.9	883.8	- 10.8	N/A
Santander	9.2%	10.5%	-1.3%	46.2	3.9%	N/A	0.9%	5.2	5.2	-	502.3	- 12.4	1,192.2	- 29.5	2.8
BBVA	8.4%	10.5%	-2.1%	27.4	4.5%	4.8%	1.5%	5.5	5.5	-	325.7	- 13.0	607.2	- 24.3	4.7
CMZB	8.6%	9.5%	-0.9%	16.9	2.9%	3.2%	-0.1%	1.4	1.4	0.0	197.0	- 3.7	593.2	- 11.2	8.8
DB	9.7%	11.5%	-1.8%	30.0	1.7%	3.1%	-1.3%	18.9	2.4	16.4	309.6	- 27.3	1,788.0	- 157.4	17.3
Lloyds	9.9%	9.5%	0.0%	32.6	3.1%	3.4%	0.1%	-	-	-	328.9	-	1,034.9	-	-
Barclays	9.6%	11.5%	-1.9%	42.4	2.5%	2.9%	-0.5%	6.7	6.7	-	441.2	- 14.6	1,670.3	- 55.2	13.6
CS	10.2%	11.0%	-0.8%	22.1	3.0%	3.5%	0.0%	1.4	1.4	-	216.5	- 3.1	734.0	- 10.7	1.7
UBS	11.9%	11.0%	0.0%	21.4	2.5%	3.0%	-0.5%	3.6	-	3.6	179.6	- 6.2	860.3	- 29.6	8.7
Nordea	13.4%	10.5%	0.0%	21.4	3.4%	A	0.4%	-	-	-	160.0	-	625.8	-	-
Danske	12.2%	9.5%	0.0%	14.2	3.2%	N/A	0.2%	-	-	-	116.3	-	437.9	-	-
KBC	12.5%	9.5%	0.0%	11.3	4.5%	3.8%	1.5%	-	-	-	90.2	-	250.3	-	-
Total								**58.5**				**-114.4**		**-440.2**	

Source: RBS Credit Strategy estimates, company filings

*Our target capital needs are 4.5% minimum CET1 + 2.5% capital conservation buffer + G-Sifi requirements + an additional assumed buffer of 2.5% banks may hold to be conservative, or if national regulators ask them to do so to satisfy the counter-cyclical buffer. Data is as of Q3 2013 for all banks, except Rabobank where it is for H1 2013. We estimate the banks CET1 capital as the fully-loaded CET1 ratio multiplied by Basel 2 or 2.5 RWAs depending on what the bank has disclosed. We use RWAs under Basel 2 or 2.5, since most banks disclose it. However we have used Basel III RWAs for CS and UBS since they only disclose these. We assume the ratio of RWAs to total assets remains constant. Our capital estimates do not include any subsequent bond or equity issues from Q3 2013 onwards, except for Barclays, since the pro-forma impact of the rights issue was included in the Q3 filings. Thus Barclays' disclosed ratios, and our estimates, include the proforma impact of the rights issue in October. Societe Generale's disclosed ratios are proforma based on the bank's understanding of CRR/CRD4 rules as published on 26th June, including Danish compromise for insurance, and RWAs are charged at 9%. KBC ratios include state support of €2.33bn, as in the Q3 filings. For Santander, we have used a CET1 ratio of 9.2% - the bank has not disclosed its fully loaded ratio in its Q3 results, but states that it expects the ratio to be 9.2% by the end of December 2013. Credit Suisse's and UBS' disclosed leverage ratios are as per the Swiss regulator's definition. Credit Suisse's disclosed leverage ratio is the Swiss total leverage ratio and includes the exchange on October 23rd, 2013 of CHF 3.8bn hybrid tier 1 notes into high-trigger capital instruments. UBS has a phase-in Swiss SRB Basel III leverage ratio of 4.2%, above minimum requirements. For earnings, we take an average of 2011 and 2012 net income attributable to shareholders. We assume an earnings retention ratio of 50%. N/A in the earnings column means the average net income attributable to shareholders for 2011 and 2012 was negative.

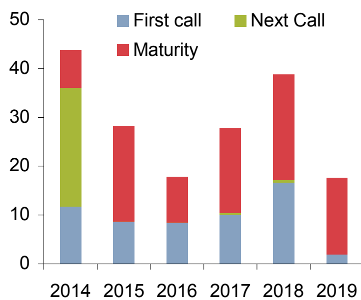
More Tier 1 capital makes Tier 2 bonds attractive

Tier 1 maturity wall (all banks)*
€bn



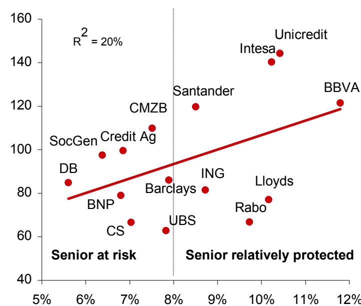
Source: RBS Credit Strategy, Bloomberg
*using the same banks in our stress tests

Tier 2 maturity wall (all banks)*
€bn



Source: RBS Credit Strategy, Bloomberg
*using the same banks in our stress tests

Senior bail-in risk is not priced in
5y senior CDS spread vs sum of equity and sub debt as % of assets



Source: RBS Credit Strategy, Bloomberg

Tier 2 capital will become the new sweet spot. Banks may build up larger buffers of equity and sub debt in order to protect other parts of their capital structure from potential bail-in. Regulators will be able to bail-in at least 8%[1] of a bank's total liabilities from 2016, according to new EU proposals.

More T2 issuance, but more equity and AT1 buffers. Of the 19 largest banks, senior debt still falls within the 8% threshold for 9 of them, even after raising CET1 and AT1 capital and reducing assets to comply with our capital estimates above. That means roughly half of the large banks will have to maintain the current T2 thresholds, but will not need to issue more. For the 9 banks in need of more T2 buffers, we calculate the aggregate shortfall would be €90bn. However, the 8% threshold will not be mandatory and banks will be able to meet it over time. Meanwhile T2 bonds will benefit from a larger buffer of bail-inable equity and tier 1 debt junior to them. This makes them, in our view, the sweet spot in banks' capital structures for investors.

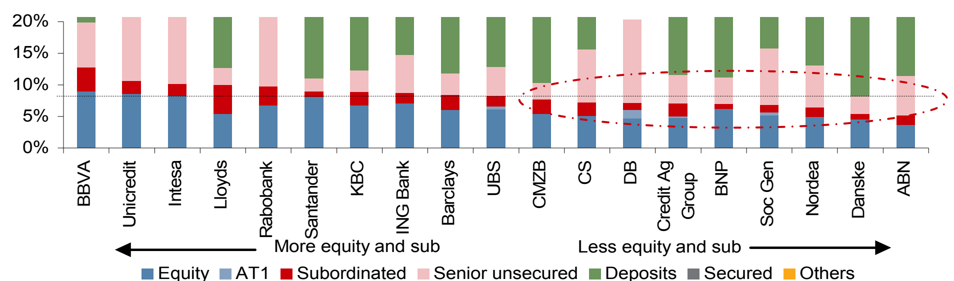
One of our top trades for 2014 is to buy lower-tier 2 bonds of Lloyds, Nationwide, Societe Generale, Credit Agricole, ING, ABN, KBC, BBVA, Caixabank, Banco Popular and Banco Sabadell. These banks all have relatively large buffers of equity and AT1.

Senior bail-in risk: not all priced in by spreads. Banks that do not raise enough equity and sub and leave senior debt within the 8% threshold could face higher senior funding costs as a result. This is not completely priced in yet – as shown below left – periphery banks for example face much higher senior funding costs despite having a bigger buffer of equity and sub than many core banks. Even with core Europe, the relationship between capital buffers protecting senior bondholders vs senior spreads is very weak. For example: low-buffer Deutsche Bank and Barclays trade at similar spreads than high-buffer ING and Lloyds. Over time we think investors will discriminate more strongly against banks which leave senior debt within the 8% bail-in threshold, resulting in higher senior spreads for these issuers.

In addition, ratings agencies could revise their ratings on senior debt downwards to account for the reduced state support. Thus, while senior debt will benefit from the increased buffer of sub debt below it, this could be partially offset by unfavourable changes in rating agencies' methodology, resulting in spread compression between senior and sub. Our financial desk strategists Paola Biraschi and Georgios Banos have analysed this in depth in their 2014 Outlook: fundamentals should matter, 6 Dec 2013.

The coco market will expand as banks look to bolster capital. We expect €28-35bn of AT1 issuance this year, and the market to grow to €100bn from €70bn currently, as banks need to raise more capital to comply with regulations. We discuss the coco market in more detail below.

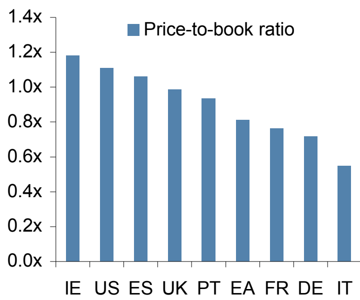
More T1 capital means less T2 issuance is needed to meet 8% bail-in threshold
Capital structure of banks, black line = 8% of total liabilities*, red circle highlights capital shortfall



Source: RBS Credit Strategy estimates, Bloomberg; *We calculate total liabilities by subtracting gross derivative exposure from total assets and adding back our estimate of net derivative exposure (25% of gross exposure) as per the definition in the new EC proposals.

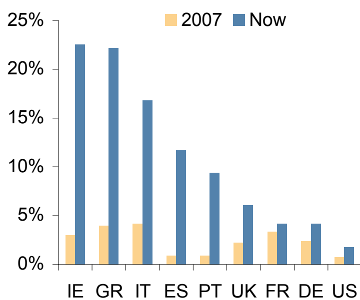
[1] Note: the 8% is a proportion of total liabilities using net derivatives exposures, rather than gross, as reported in the banks' filings. We adjust for this by assuming net exposures are equal to 25% of gross exposures.

Transparency helps
Average bank P/B ratio by country



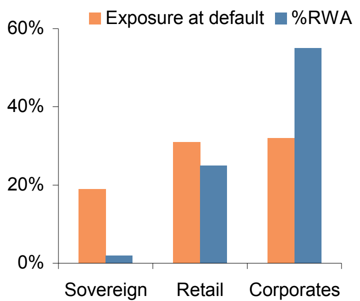
Source: RBS Credit Strategy, Bloomberg

Comparing bank NPLs is hard
Non-performing loans, % total loans



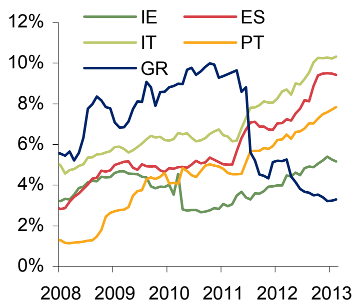
Source: RBS Credit Strategy, Bloomberg, filings

Sov now classed as risk-free
Credit risk exposure vs risk weights



Source: RBS Credit Strategy, EBA

Stronger sovereign-bank nexus
Bank % holdings of sovereigns



Source: RBS Credit Strategy, ECB

ECB AQR could re-price false safe haven banks

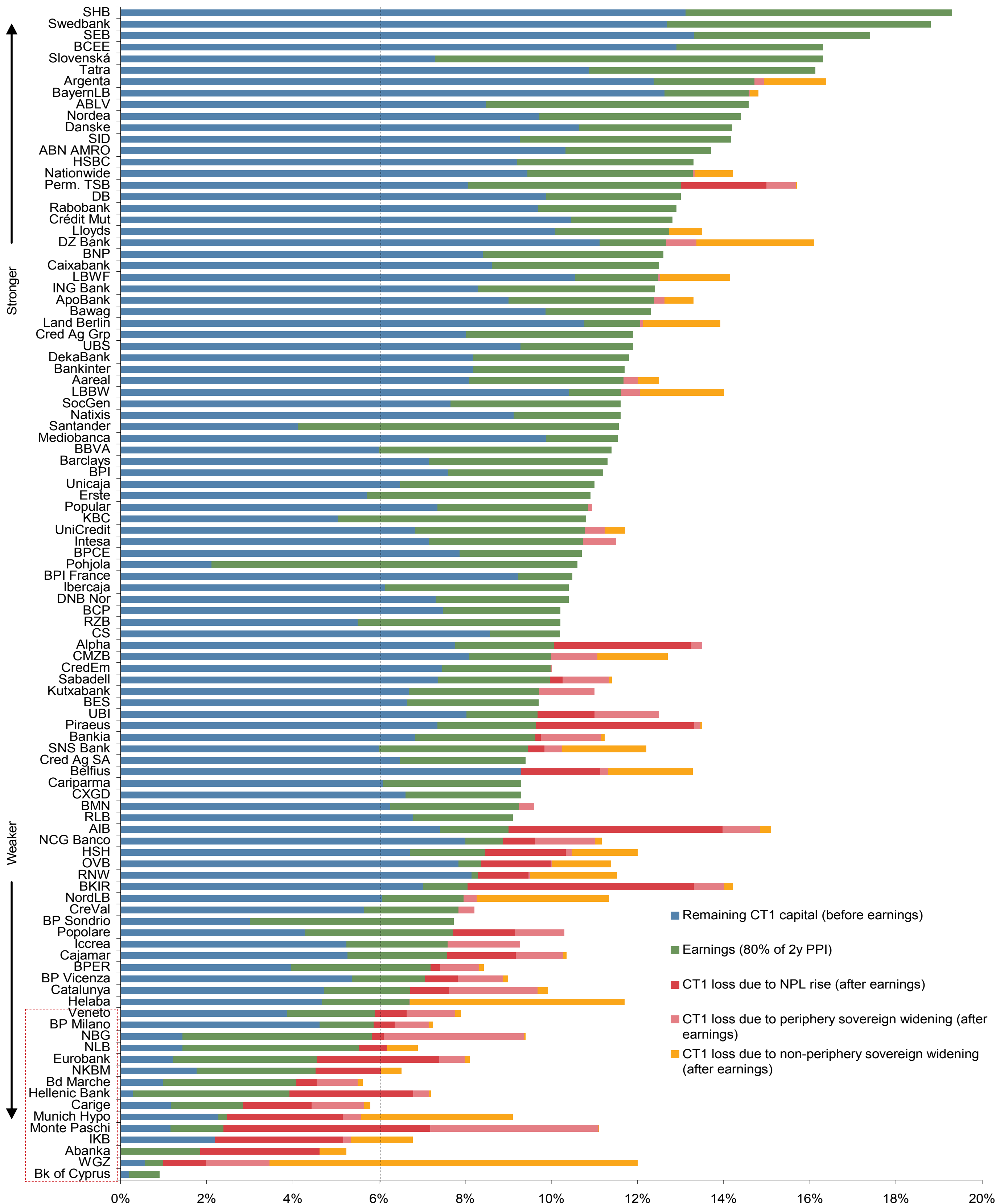
The ECB will conduct a comprehensive assessment of the Eurozone banking system before it assumes direct supervision of the 130 largest lenders under the Single Supervisory Mechanism in November. The asset quality review and stress tests form a critical part of this assessment, and will be used to identify weak banks in an effort to recapitalise them.

1 **AQR: risk weight harmonisation and higher sovereign risk weights may require banks to hold more capital**. The asset quality review (AQR) will focus on the riskiest elements of bank balance sheets: real estate, shipping and small business, leveraged and project finance loans and derivatives portfolios. It will use bank balance sheet data as of 31st December 2013. The AQR will use harmonised definitions of NPLs and forbearance practices as proposed by the EBA.

- **Risk weight adjustment could hurt core European banks with low RWA intensity**. Without granular loan portfolio data, it is difficult to accurately assess which banks will be hurt the most by the AQR. German and Nordic banks with considerable exposure to shipping loans could be negatively impacted, for example. The ECB is also considering adjusting risk weights, which could hurt banks with low RWA intensity. Increasing risk weights would force banks to hold more capital against assets. Investment banks which earn a substantial portion of their revenue from trading activities tend to have low RWA intensity - Deutsche Bank and Barclays for example. Nordic banks have low RWA intensity due to low risk weights on mortgages, which comprise the bulk of their loan book. Several core European banks: Deutsche Bank, UBS, Societe Generale, Nordea, Credit Agricole Group, Barclays, Danske, ABN, Credit Suisse and BNP Paribas have an RWA intensity of less than 30%.
- **Periphery banks are vulnerable if the ECB and EBA introduce tougher capital requirements for sovereign bonds**. Currently sovereign bonds from member states can have a zero risk weight, as EU banks are allowed to permanently use Basel's standardised risk-weight approach (BIS). However, ECB Executive Board Member Peter Praet discussed how the ECB could toughen requirements for sovereign bond holdings to discourage banks from using ECB liquidity to buy more government debt (FT). The ECB faces a dilemma: too much sovereign holdings expose banks to fluctuations in risk premia and discourage lending to the real economy; but many mid-tier banks in the periphery with low RoEs wouldn't be able to survive without the profit from sovereign carry (The Silver Bullet | The Sovereign-bank dilemma, 12 December 2013). If the ECB and EBA decide to increase risk weights on sovereign bonds, banks will need more capital or asset reduction to meet the requirements. This is especially so for many periphery banks that have increased their holdings of sovereign bonds since the crisis.

2 **Stress tests: mid-sized lenders in Italy, Slovenia and Germany are weak**. The ECB and EBA will conduct the stress tests on roughly 130 Eurozone banks. The ECB will require banks to have a 6% CET1 ratio, according to unofficial ECB comments (Bloomberg). The stress test will however use the definition of capital that will be valid at the end of the test's horizon, rather than that applicable on 31st December 2013 for the AQR. We expect large Eurozone banks to pass the tests, as shown in our simplified stress tests on the next page. However we think roughly 15% of banks in our sample may fail. These include mid-tier banks in Italy, Spain, Slovenia and Germany. However, the banks which could fail only account for roughly 2.5% of total Eurozone banking assets and are not systemic, in our view. Details of how we run the stress tests can be found in the Appendix. We see the asset quality review and stress tests as a positive, as more transparency will increase investor confidence.

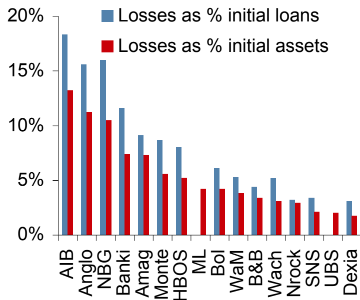
Bank stress tests: Mid-tier Italian, Spanish and Slovenian banks are vulnerable to rising NPLs and sovereign yields
Stressed CT1 ratio, assuming 30% rise in NPLs, 50% coverage ratio and 100bp widening of sovereign bond yields over 2 years



Source: RBS Credit Strategy, Bloomberg, EBA. Sovereign holdings data is from the EBA, and is as of June 2013. If sovereign holdings data is unavailable we use the national average. If EBA data is not available for any bank from a country, we use the periphery or core average, depending on the bank's location, or ECB data if available. We have used data from company filings for UBS. 2y PPI is 80% of average pre-provision income in 2011-12, as % of RWAs; We use the most recent filings available to conduct our stress tests. We have not taken into account measures taken by banks to improve capital ratios post-filing. The capital ratios are measured against each bank's own reporting standards, typically Basel 2, 2.5 or the German Solvency standard for the Landesbanks. Slovenska and Tatra appear high as we are using T1 capital because CT1 is not available. IKB and Belfius have negative earnings so we reduce remaining CT1 capital to adjust for this. Bank of Cyprus had a negative capital position so we have reduced earnings to adjust for this. The ECB may use 6% as its threshold for the stress tests.

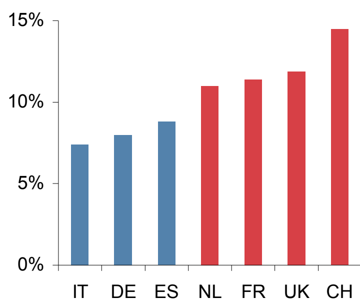
Still too big to fail

Bank losses in previous crises
Losses as % of loans and assets



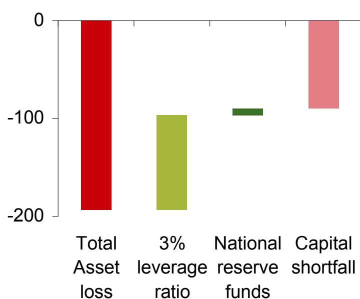
Source: RBS Credit Strategy, BBG, Company filings

Scenario 1: chronic crisis
Capital shortfall, % GDP (red: >10%)



Source: RBS Credit Strategy estimates, ECB. We estimate the size of the national reserve fund for the UK by taking 1% of covered deposits (deposits<£85k, assumed to be 40% of total deposits) as per new EC proposal. We assume no national reserve fund for Switzerland.

3% leverage ratio: not enough
Shortfall in Spain, €bn



Source: RBS Credit Strategy estimates

We measure the burden on sovereigns from bank crisis as dependent on the following factors:

Crisis cost = [bank losses – (capital + bail-in + backstops)] x size of system

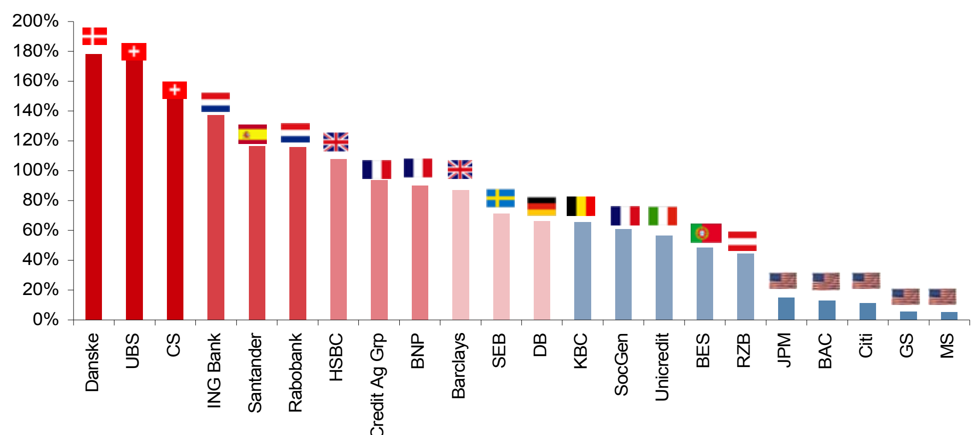
For sovereigns to be insulated from the cost of a crisis, we estimate banks should reach a leverage ratio of 5.8%, equal to raising €492bn of capital. Alternatively, the size of current backstops or bail-inable amounts should be increased. We calculate the potential cost of a crisis based on two scenarios:

Scenario 1: chronic crisis. In the first scenario we assume all banks in each European country experience a 6% loss on total assets, but remain viable. Our estimate of 6% asset loss is based on the losses seen during previous crises, as shown on the left (also see Appendix). We assess whether banks could withstand the 6% loss, and recoup this through their existing capital and national backstops. We assume that regulators would not bail-in banks in this scenario, as they remain viable, but national funds would still be made available by the sovereign (e.g. through a loan rather than a recapitalisation), as happened with the ESM/FROB loan to Spanish banks last year.

The 6% loss would be partially absorbed by bank capital. As banks will have a minimum 3% Basel III leverage ratio, at least half of the losses will be covered through this. After these losses, we assume the national compartment of the single resolution fund will be used (details here). We estimate the size of the national compartments by using the ratio of country deposits to total deposits in the Eurozone, multiplied by the estimated size of the fund at €55bn. For example, Spanish deposits are €2.1tn and Eurozone deposits are €16.8tn, implying a national resolution fund size of €6.8bn (2.1/16.8*55). This amount is small, accounting for only 0.2% of total Spanish bank assets. Once the banks' own capital and the national resolution fund has been used up, they would still need additional capital from public sources. For example, in Spain's case, there would still be a shortfall of 2.8% (6% - 3% - 0.2%) of total assets, or €90bn.

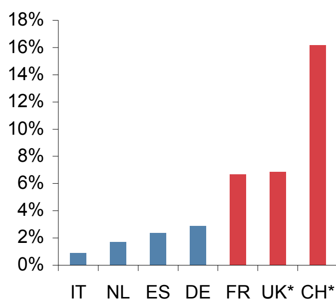
Scenario 2: systemic crisis. In the second scenario, we simulate the idiosyncratic failure of the top two banks in each country such that each bank will experience a 12% loss on total assets (see Appendix), and are unviable. We estimate the 12% figure based on the worst losses faced by some banks during the last crisis, as shown left. As per bail-in proposals, we assume the banks have to first bail-in 8% of total liabilities (using netted derivatives exposures, as above). If private sources of capital are exhausted, the banks will draw upon the national compartment of the single resolution fund. If still insufficient, we assume the country will resort to the remainder available from the proposed €55bn single resolution fund.

Too big to fail has not gone away
Bank assets/GDP, by individual institution



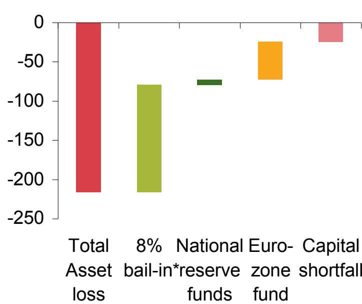
Source: RBS Credit Strategy, Bloomberg

Scenario 2: systemic crisis
Capital shortfall, % GDP (red: >5%)



Source: RBS Credit Strategy estimates, ECB
*We have assumed the €55bn SRM fund will not be used to resolve UK and Swiss banks, as they are not part of the SSM. For the UK, we have assumed Barclays and Lloyds are the two largest banks

Scenario 2: systemic crisis
Potential shortfall in Spain €bn



Source: RBS Credit Strategy estimates
* taken 8% of total liabilities, calculated by subtracting gross derivative exposure from total assets and adding back our estimate of net derivative exposure (25% of gross exposure) as per the definition in the new EC proposal.

Breakeven leverage ratios
Ratios needed to keep sovereigns independent from bank failures

Spain	5.8%
Netherlands	5.9%
Italy	5.8%
Germany	5.8%
France	5.8%

Source: RBS Credit Strategy estimates

For example, if BBVA and Santander were to lose 12% of their assets, it would result in a combined loss of €216bn. Applying our interpretation of the 8% bail-in rules, roughly €137bn of losses would be absorbed. Even after the €55bn available from the single resolution fund (inclusive of the national compartment), there would still be a capital shortfall of €24bn to be filled. Thus the single resolution fund, estimated at €55bn, may not be a large enough backstop if there is a serious bank failure. A report by Bruegel also highlights this backstop is only expected to be at its full size by 2025, which could further complicate bank resolutions in the mean time.

Spain is not the only country which would have to inject additional capital after a potential bank failure even after using this combination of private, national and European backstops. Countries with very large banking sectors such as Switzerland, the UK and France would face an even greater capital shortfall, as shown left.

Of course, these scenarios are severe, and do not take into account of earnings capacity in the system, which we assume would be reduced during the crisis. Nevertheless, our analysis does highlight that the current regulations, aimed at promoting the resilience of the European banking system, is still not enough to make it completely safe and not a threat to sovereigns.

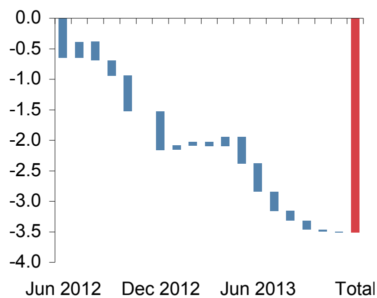
US, Swiss and UK regulators are raising the bar higher than 3%. Our breakeven leverage ratio estimates are close to the US regulators' potential requirements for banks: the eight largest bank-holding companies may have to increase leverage ratios to 5% and 6% for their FDIC-insured subsidiaries (WSJ). The Swiss Finance Ministry has proposed to raise the leverage ratio to 6-10%. The Swiss National Bank has also recently proposed raising the countercyclical capital from 1% to 2% of RWAs secured by residential property in Switzerland. The BoE will start a year-long review on whether to implement a leverage ratio greater than 3% before 2017, as previously planned (BBC). For now, however, the BIS has maintained the minimum leverage ratio at 3%, and loosened some requirements. We think this was a move in the wrong direction, as we discuss below. On the other hand, the proposals by the UK, Swiss and US regulators are positive for financial stability in the medium-term.

Our conclusion: Eurozone banks must double the leverage ratio to become independent of sovereign help. European banks can still face substantial capital shortfalls in a chronic crisis as well as in a systemic loss scenario. According to our estimates, banks need to reach a breakeven leverage ratio of around 5.8% to effectively fill these shortfalls, even after taking into account the size of national resolution funds. If the 19 banks in our analysis were to increase their leverage ratio to 5.8%, we estimate they would need €492bn of gross capital. A recent independent study also shows banks may need between €509-767bn of capital, depending on the leverage ratio used (VOX).

Basel: Recent developments on the leverage ratio

A move in the wrong direction for financial stability, in our view

BIS eases leverage ratio, loosening bank capital requirements: a bad move for financial stability in the medium term. The Basel Committee has changed the leverage ratio definition to reduce the amount of assets against which banks have to hold capital. We think this is a bad regulatory move for the safety of the banking system in the medium term. Unlike CET1 ratios, calculated over risk-weighted assets, the leverage ratio applies an "exposure measure" which is closer to a bank's total assets. This prevents banks from employing risk-weight-optimisation to improve their capital – a practice that has been particularly successful around large banking groups. In



Source: RBS Credit Strategy, ECB

practical terms, this means that several large Eurozone banks optimised their assets to have risk-weighted assets down to 25% or even 20% of total, as we showed on Page 2. This means that, for example, a bank with 20% RWA as percentage of total assets can have a 10% CET1 ratio – but in monetary terms this would equal just 2 Euros of core capital to 100 Euros of assets – too low even by common sense.

The leverage ratio prevents risk-arbitrage, by enforcing a minimum level of capital measured against an "exposure measure" which approximates total assets. The leverage ratio will need to be fully disclosed by Eurozone banks from 2015 and will become mandatory from 2018. The current minimum leverage ratio is set at 3%, although national regulators in the US and Switzerland have recommended higher ratios. The Basel committee's announced changes effectively reduce the "exposure measure", i.e. the denominator against which the leverage ratio is calculated (BIS). The FT says the move should boost the current ratio by around 0.2% for large banks.

The revised standard allows greater netting of derivatives and repo transactions and reduces capital required against off-balance sheet items from 100% to the standardised approach for credit risk, capped at a minimum 10%, as discussed by our financial trading strategists Paola Biraschi and Georgios Banos recently (Flash on Financials | Regulation update: leverage ratios, 13 January 2013). This will reduce the additional capital requirements for some banks, particularly investment banks Deutsche Bank, Barclays, Credit Suisse and UBS. We continue to think that these banks hold too little capital, particularly given their large size relative to their sovereign. European banks remain the largest in the world, with €32tn assets outstanding, roughly 3.2x GDP. Many are larger than the sovereign they are based in, measured as total assets/GDP.

Concerns about over-regulation and its impact on lending have so far proved unfounded. Some feared that the ECB's upcoming asset quality review and stress test would encourage banks to cut back on lending and shrink their balance sheets. However, deleveraging is actually slowing down, to around €10-20bn/month recently vs €300-400bn/month in early 2013 (left chart). The transparency-enhancing effect of the ECB's comprehensive assessment and the decrease in systemic risk are overshadowing the intrinsic burden of higher regulation. The examples of Spain and Ireland show that transparency works – it improves investor demand, allows banks to raise capital and eventually to lend. We think deleveraging will continue to slow.

What Basel should do, instead, is to readjust its risk weights to favour lending. Currently Basel's risk weights allow banks to hold virtually zero capital against sovereign debt. On the other hand, risk weights for loans and particularly SME loans remain much higher. This gap in capital requirements for loans vs sovereign debt has created an incentive for banks to buy sovereign debt, while lending remains much more capital-intensive. For example, banks in Italy and Spain currently own around 10% of their assets in sovereign debt as they lack the capital to lend. It is a catch-22 problem, but we believe Basel's risk weights do not encourage banks to run their core business - which is lending and not trading sovereign bonds. Basel's argument against this is that the low risk weights on sovereigns actually depend on the EU allowing banks to use standardised-approach risk weights indefinitely instead of the IRB approach. This is a nuance, in our view, as even when a bank uses its own IRB calculations for sovereigns, the probability of default and loss given default applied can be very low.

Why we think it's a steer in the wrong direction. Europe's credit markets still rely on banks for 80% of credit, and banks need more capital to operate safely, without potentially encumbering sovereigns. Basel's approach currently favours large systemic banks or investment banks with plenty of level III assets, which have more ways to optimise their risk and risk weighted assets vs commercial banks and mid-tier banks with a heavy lending base, which are crucial for SMEs and job creation. The leverage ratio should be increased, instead, for the long-term health of the system and for financial stability.

Cocos: Market doesn't price the risks

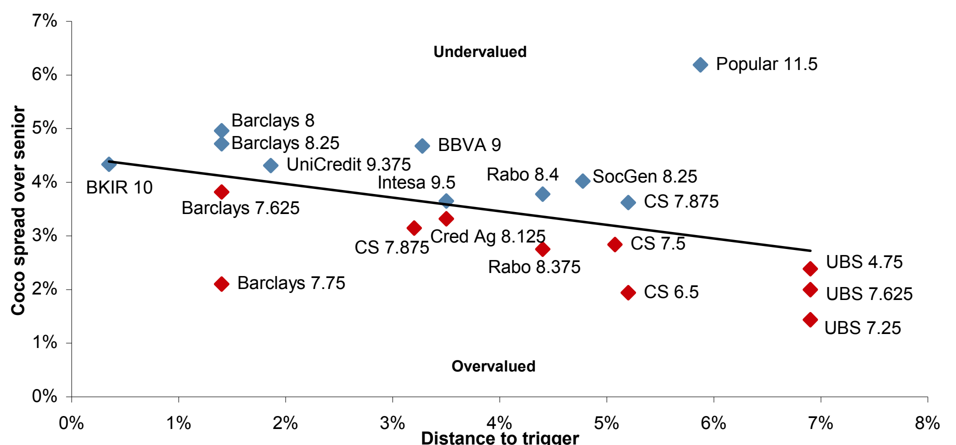
We find that investors are pricing the risk of coupon deferability adequately, but are not factoring in the conversion probability or mechanism. We think cocos issued by commercial banks BBVA and Soc Gen are undervalued whereas cocos from investment banks Credit Suisse and Barclays are overvalued.

Everybody dances the coco dance – but the market is not pricing risks associated with cocos correctly. Cocos present three main risks to investors: conversion probability, conversion mechanism (into equity or permanent write down), and coupon deferability. We did extensive analysis using a panel regression to check if investors are pricing these risks correctly. We regress the difference between the coco spread and the senior spread against the three features: the distance between the bank's current capital ratio and the pre-set conversion trigger (distance to trigger), whether there will be equity conversion or principal write-down if the trigger is reached (conversion mechanism), and whether there is coupon deferability (T1/T2). We use 20 bonds from 11 banks, with data from 30 September 2013 to 13 January 2014. We also ran the regression using the ratio of the coco to senior yield, but our conclusions remain the same: the market is not adequately pricing conversion risks.

Policy makers are also concerned about signs of frothiness in the coco market. The Bank of England (BoE) also commented on the potential risks arising in the coco market, given investors' search for yield in its latest Financial Stability Report. The BoE notes "*There were tentative signs of investor willingness to take on more complex forms of risk…and the investor base in recent issues of European bank contingent capital instruments…, broadened to institutional investors*". Critically, the BoE also noted, "*…there were concerns that investors were placing insufficient weight on the likelihood of such a conversion being triggered*". This is in line with our view and highlights the risk of overvaluation in some parts of the coco market.

The coco market is not yet fully developed: be selective. All the risks inherent in cocos do not appear adequately priced, in our view. Moreover, the market remains dominated by hedge funds and private wealth investors, resulting in a relatively more fragile and fragmented investor base. Given the mispricing of risk and fragile investor base, we think investors need to be selective of which cocos they own. Together with our financial desk strategists Paola Biraschi and Georgios Banos, we think cocos from the commercial banks BBVA and Societe Generale are undervalued. On the other hand, some cocos from Credit Suisse and Barclays – investment banks with large trading operations and volatile earnings – are overvalued, based on our analysis.

BBVA and Soc Gen: undervalued – Credit Suisse and Barclays: overvalued
Coco-senior spread vs distance between capital ratio and conversion trigger



Source: RBS Credit Strategy, Bloomberg

Appendix: List of outstanding Contingent Convertible bonds

Contingent convertibles: Wide variation in features among different instruments

Issuer	Issue Date	Rank	Coupon	Size	Maturity	Trigger	Mechanism
Bank Of Ireland	29/07/2011	Tier 2	10%	€1bn	30/07/2016	CET1 ratio < 8.25%	Equity Conversion
Barclays	21/11/2012	Tier 2	7.625%	$3bn	21/11/2022	CET1 ratio < 7%	Permanent write-down
Barclays	03/04/2013	Tier 2	7.750%	$1bn	Call 10/04/2018	CET1 ratio < 7%	Permanent write-down
Barclays	10/12/2013	Perpetual	8%	€1bn	Call 15/12/2020	CET1 ratio < 7%	Equity Conversion
Barclays	20/11/2013	Perpetual	8.25%	$2bn	Call 15/12/2018	CET1 ratio < 7%	Equity Conversion
BBVA	30/04/2013	Perpetual	9%	$1.5bn	Call 09/05/2018	CET 1 ratio < 5.125%, EBA CTI < 7%, Capital Principal ratio <7%, Tier 1< 6% & the bank or group has reported losses > 1/3 of its capital & reserves in the last 4 quarters	Equity Conversion
Credit Ag SA	12/09/2013	Tier 2	8.125%	$1.0bn	Call 19/09/2018	Basel III CET1 ratio < 7%	Permanent write-down
Credit Ag SA	15/01/2014	Perpetual	7.875%	$1.75bn	Call 23/01/2024	Credit Ag SA Group CET1< 5.125% or Credit Ag Group CET1 < 7%	Temporary write down
CS	24/02/2011	Tier 2	7.875%	$2bn	Call 24/08/2016	Basel III CET1 ratio < 7%	Equity Conversion
CS	22/03/2012	Tier 2	7.125%	CHF750m	Call 22/03/2017	Capital ratio in any interim <5%	Equity Conversion
CS	01/08/2013	Tier 2	6.50%	$2.5bn	08/12/2023	Basel III CET1 ratio < 5%	Permanent write-down
CS	18/09/2013	Tier 2	5.75%	€1.25bn	Call 18/09/2020	Sum of (i) CET1 ratio and (ii) higher-trigger capital ratio < 5%	Full & Permanent Write-Down
CS	11/12/2013	Perpetual	7.5%	$2.25bn	Call 11/12/2023	Sum of (i) CET1 ratio and (ii) higher-trigger capital ratio (7% trigger) < 5.125%	Full & Permanent Write-Down
Intesa	01/10/2010	Perpetual	9.50%	€1bn	Call 01/06/2016	Total risk based ratio < 6% (BOI)	Temp write-down/ write-up
KBC	17/01/2012	Tier 2	8%	$1bn	Call 25/01/2018	CET1 ratio < 7%	Permanent write-down
Lloyds	03/11/2009	Tier 2	-	£7.6bn	25/05/2020	CTI < 5%	Equity Conversion
Popular	10/10/2013	Perpetual	11.50%	€500mn	Call 10/10/2018	CET1 ratio < 5.125% or Tier 1 < 6% (with losses in four most recent quarters)	Equity Conversion
Rabobank	19/03/2010	Snr Cont. Notes	6.875%	€1.25bn	19/03/2020	Equity Capital < 7%	Temp write-down (principal to 25%)
Rabobank	26/01/2011	Perpetual	8.375%	$2bn	Call 26/07/2016	Equity Capital < 8%	Permanent write-down
Rabobank	09/11/2011	Perpetual	8.40%	$2bn	Call 29/07/2017	Equity Capital < 8%	Permanent write-down
SocGen	29/08/2013	Perpetual	8.25%	$1.25bn	Call 29/11/2018	Basel III CET1 ratio < 5.125%	Temp write-down/ write-up
SocGen	18/12/2013	Perpetual	7.875%	$1.75bn	Call 18/12/2023	CT1 or CET1< 5.125%	Temp write-down/ write-up
UBS	22/02/2012	Tier 2	7.25%	$2bn	Call 22/02/2017	Basel III CET1 ratio < 5%	Permanent write-down
UBS	10/08/2012	Tier 2	7.625%	$2bn	17/08/2022	Basel III CET1 ratio < 5%	Permanent write-down
UBS	15/05/2013	Tier 2	4.75%	$1.5bn	Call 22/05/2018	Basel III CET1 ratio < 5%	Permanent write-down
Unicredit	21/07/2010	Perpetual	9.375%	€500m	Call 21/07/2020	Total risk based ratio < 6% (BOI)	Temp write-down/ write-up

Source: RBS Credit Strategy, RBS Financials Trading Desk Strategy, company filings, Bloomberg

Appendix

1. Estimating capital and asset reduction needs

Methodology: The CET1 capital ratio required by banks is the sum of 4.5% minimum CET1 plus the 2.5% capital conservation buffer, the additional requirements for G-SIFI's as calculated by the FSB and an additional 2.5% buffer we assume banks would maintain on top. This also takes into account of potential national counter-cyclical buffers, which will vary from 0-2.5%. For leverage, we assume banks will need to reach a ratio of 3%. We estimate it as CET1 capital / total assets. Thus our estimates of the leverage ratio may differ from the bank's disclosed levels. We have used this definition, rather than the BIS' proposed Tier 1 capital/ exposure measure definition, since all banks do not currently disclose their exposure measure.

In all cases where banks need additional capital to fill a potential shortfall, we assume this is done through capital raisings and asset reduction (80/20 split). If a bank only faces a CET1 shortfall to meet our capital target, but meets the minimum leverage ratio requirement, we assume this is filled purely with CET1 capital and asset reduction. If the bank faces only a leverage ratio shortfall, but meets our estimated CET1 capital target, we assume this shortfall is made up through issuing more AT1 capital and asset reduction. If a bank faces both a leverage ratio and capital ratio shortfall, we first calculate the amount of AT1 capital and asset reduction it will need to satisfy the leverage ratio. If the bank still has a CET1 shortfall to meet the capital target after accounting for the RWA/asset reduction, we then calculate the amount of CET1 capital it will still need to fill in the gap.

2. Estimating deleveraging needed by Eurozone banks

We use the asset reduction numbers from the above section to calculate how much deleveraging is needed across Eurozone banks. We assume large banks account for 3/8 of total bank assets, and small and mid-tier banks make up the rest. We assume large banks delever in a 80/20 split between raising capital and shedding assets. This assumption is based on the deleveraging trends observed recently. Large banks are able to tap the market comfortably for equity, with Commerzbank, DB and Barclays doing rights issues in 2013. We assume a 50/50 split for small banks since some in the periphery have been able to raise capital – Banco Sabadell's €1.4bn rights issue and Banco Popular's €500mn AT1 issue last year demonstrate this. However there are several small banks, which may still have trouble raising private capital, and hence we assume a more conservative 50/50 split between raising capital and shedding assets.

Calculations:

Total asset reduction by large Eurozone banks (with 80/20 split between capital raise and asset reductions) = €344.7bn

Total asset reduction by large banks needed (assuming no capital raise)
= 344.7*100/20 = €1.72tn

Total asset reduction for entire banking system (assuming no capital raise) = €1.72*8/3 = €4.6tn

Now for smaller banks,

Asset reduction for small banks (assuming no capital raise) = €4.6tn * 5/8 = €2.87tn

Asset reduction for small banks (assuming 50% capital raise, 50% asset reduction) = €2.87tn * 50/100 = €1.44tn

Thus total deleveraging needed = Large + small banks = €0.34tn + €1.44tn = €1.78tn

3. Stress tests

We stress 102 banks using these assumptions:

- **Capital erosion due to deteriorating asset quality**. We assume NPL ratios rise 30% over the next 2 years, and are covered 50%; this is consistent with the rise in bad loans over the past 2 years in the periphery. We also stress sovereign bond holdings with a 100bp widening in overall yields, with the assumption that there are no additional unrealised gains or losses on these holdings.

- **Capital generation through earnings**. Banks can absorb the above losses with earnings over the period; we use 80% of pre-provision income in 2011 and 2012.

The reduction of the CT1 capital ratio due to bond widening is the sum of the orange and pink, and the losses due to rising bad loans is the red bar in the chart on the next page. The capital remaining after the exercise is the sum of the green and blue bars. The CT1 ratio is as per Basel II or 2.5 rules, as most banks do not yet report Basel III ratios.

4. Estimating capital shortfalls in a crisis

1 **Chronic crisis**: We assume each country will experience a 6% loss on total banking assets, based on estimates of asset losses in past banking crises. In the most recent European crises, the non-performing loan (NPL) ratios in the periphery countries rose up to 23% in Ireland, 22% in Greece, 17% in Italy, 12% in Spain and 9% in Portugal. Assuming total loans account for 70% of the banks' total assets and a recovery rate of 40%, the countries would have experienced total asset losses ranging between 4% and 10%, calculated by Asset losses = NPL * (1 – recovery rate). Given the varying sizes of losses and current differences in NPL classification across European bank, we think a relatively moderate estimate of 6% asset loss is reasonable.

2 **Failure of systemic banks**: We assume the top two banks in each country become non-viable and require resolution, while all other smaller banks remain unaffected. In this scenario, we assume each bank will suffer a higher loss at 12% of total assets. This estimate is based on the asset losses experienced by large banks that had required resolution or been recapitalised by public funds in recent years. The % asset losses in previous bank failures range between 2% to 13%. We have chosen 12% which is on the higher end of the spectrum to demonstrate what can happen in a more severe scenario.

5. Cocos: Markets don't price the risk

We have tested how the different features of cocos affect their market prices through a panel regression. In our regression, we used weekly data from 30 September 2013 to 13 January 2014 for 20 bonds issued by 11 banks, with 292 observations in total. Our dependent variable is the spread of the coco over a senior bond from the same bank with similar date of maturity. The higher the spread, the cheaper is the coco. As an alternative, we also run the same regression using the ratio of the coco yield to senior yield. The higher the ratio, the cheaper is the coco. Our explanatory variables are the three key features of cocos: distance from the bank's current capital ratio to the bond's conversion trigger, conversion mechanism and coupon deferability.

In the first step, we ran a regression on the spread or ratio, using the following equation to get rid of the time effect:

$$S_{kt} = \alpha_k + \delta_t + \varepsilon_{kt}$$

where S_{kt} is the coco spread or ratio depending on the model, α_k reflects bond specific effect free from variation of time while δ_t captures time specific effect.

Secondly, we regress the bond specific residuals on the three explanatory variables:

$$\alpha_k = \theta_1 DT_{ki} + \theta_2 T_k + \theta_3 WC_k + U_i + \varepsilon_{ki}$$

where DT_{ki} is the distance to trigger. T_k is a dummy variable capturing the coupon deferability factor where we assign 1 to a bond if it is Tier 1 and 0 if it is Tier 2. WC_k is also a dummy variable where we assign 1 to a bond if there is principal write-down when the conversion trigger is reached and 0 if there is equity conversion. U_i is the bank dummy to control for bank specific effects.

By intuition, we expect all three variables to be significant. We expect the coefficient of DT_{ki} to be negative as the further the current capital ratio is above the conversion trigger, the lower is the conversion risk, hence the lower the spread or ratio should be. We expect both T_k and WC_k to have positive coefficients as coupon deferability and principal write-down should make a bond less valuable.

However, our regression results show that only the coupon deferability factor is both significant and carries the correct sign. The distance to trigger factor is insignificant and carries the wrong sign, whereas the conversion mechanism has the wrong sign. These results suggest that the market is only correctly pricing in the effect of coupon deferability, but not the conversion risks of the bonds.

Regression 1: Using the spread of cocos over senior

Dependent Variable: α_k

Explanatory variables	Coefficient	Std. Error	t-Statistic	Prob.
DT_{ki}	2.4	2.2	1.1	0.3
T_k	1.5	0.1	16.1	0.0
WC_k	-1.1	0.1	-10.1	0.0

R-squared	0.5	Mean dependent var	0.0
Adjusted R-squared	0.5	S.D. dependent var	1.3
S.E. of regression	0.9	Akaike info criterion	2.5
Sum squared resid	213.9	Schwarz criterion	2.6
Log likelihood	-368.9	Hannan-Quinn criter.	2.6
Durbin-Watson stat	0.0		

Source: RBS Credit Research, RBS European Economics

Regression 2: Using the ratio of coco yield to senior yield

Dependent Variable: α_k

Explanatory variables	Coefficient	Std. Error	t-Statistic	Prob.
DT_{ki}	11.6	3.1	3.7	0.0
T_k	0.1	0.1	1.0	0.3
WC_k	-0.8	0.2	-4.9	0.0

R-squared	0.1	Mean dependent var	0.0
Adjusted R-squared	0.1	S.D. dependent var	1.2
S.E. of regression	1.2	Akaike info criterion	3.2
Sum squared resid	414.6	Schwarz criterion	3.2
Log likelihood	-465.5	Hannan-Quinn criter.	3.2
Durbin-Watson stat	0.0		

Source: RBS Credit Research, RBS European Economics

Summary of sector and region recommendations

Green shading = long/overweight; red shading = short/underweight; grey shading = neutral/marketweight

	Core Europe	Semi-Core	Non-EMU	US	EM	Periphery: Spain	Italy	Ireland	Portugal	Greece	Overall
Ins sub							Generali				OW 25%
Bank sub	Deutsche Bank, Commerzbank	Soc Gen, Credit Ag, ING, ABN, KBC	Lloyds, Nationwide			BBVA, Caixabank, Popular, Sabadell	UniCredit		BES		OW 20%
		Rabobank	SEB, Nordea, Handelsbanken, Swedbank, Danske								
Bank senior	Deutsche Bank, Commerzbank	Soc Gen, Credit Ag, ING, ABN, KBC	Lloyds, Nationwide	Citi, BoA		BBVA, Popular, Sabadell	UniCredit, Monte, Popolare	Bank of Ireland	BES, Caixa Geral		OW 10%
		Rabobank	Barclays, SEB, Handelsbanken, Swedbank, Nordea, Danske	MS, GS							
Ins senior											OW 10%
Telecoms	Telekom Austria	KPN, Vivendi	Cable & Wireless			Telefonica					OW 10%
			Telenor, Teliasonera, Ericsson, Vodafone								
Utilities	EnBW, RWE (Hybrids)	Veolia, Suez (Hybrids)	United Utilities Dong Energy (Hybrid)			Gas Natural, Iberdrola					OW 10%
		GDF Suez	Centrica								
Fins Services											OW 5%
Industrials		Alstom	Vinci (Hybrid)					CRH			OW 5%
		EADS	Rolls Royce					Ingersoll-Rand			
Cons Services		Carrefour, Casino	Tesco, Compass, Pearson				Lottomatica				UW -15%
		Publicis, Sodexo, Wolters Kluwer									
Cons Goods	BMW, Henkel	Valeo	Volvo							CCHB	UW -15%
		Unilever, LVMH, Kering	Kingfisher, Svenska Cellulosa								
Technology											UW -50%
Oil & Gas	OMV (Hybrid)	Shell, Total, Technip	Statoil				ENI				UW -50%
Materials	Lanxess Linde (Hybrid)	DSM									UW -55%
	BASF										
Healthcare		Sanofi									UW -75%
HY	Thyssenkrupp	Lafarge, Alcatel, Peugeot, Renault Wendel	Ladbrokes, Dixons			Cirsa, ENCE, Gestamp, Campofrio, Bezinc	Telecom Italia, Fiat, Fiat Industrial, Finmeccanica, Buzzi, Cerved, Bormioli, IVS, EI, Guala, Lecta, Zobele, Sisal	Smurfit Kappa	Portugal Telecom, EDP, Portucel	OTE, FAGE, Frigoglass, Yioula Glassworks	OW
Overall	UW	OW	OW	UW	UW	OW	OW	OW	OW	OW	OW

Source: RBS Credit Strategy

Our views in bullets

Spreads. We expect political risks to subside, growth and budgets improve, and banks continue to rebuild capital in Eurozone. The ECB will become Europe's bank regulator in September 2014, which will favour convergence across core-periphery bank spreads. We forecast high yield spreads to decline to 275bp by year-end, using the Xover index as reference.

Default rates. We think default rates will start to fall next year to around 1%, on improving growth, stabilisation in unemployment and lending as well as a decline in the proportion of very low-rated companies. Default rates in the US instead will remain around 2%, on higher re-leveraging and shareholder-friendly activity.

Ratings. Ratings will gradually turn upwards for sovereigns on better growth, and later on for banks on new policies from the ECB, EIB and structural reforms to the banking system. Ireland, Portugal and Spain will benefit from positive rating actions.

Financials. We are long financials. We stay long periphery banks in senior debt on improving capital and liquidity as well as negative net supply of bonds, and long senior and sub debt in UK, France, Holland and Spain. Bank sub debt will continue to outperform this year, on ECB measures to strengthen banking system and more issuance of equity. We avoid banks that are dependent on investment banking and which trade too tight in core Europe and Scandinavia– which could face increasing regulatory risk.

Corporates. Peripheral corporates offer a good premium to those in the rest of Europe. Larger companies with diversified revenues and stronger fundamentals will benefit as investors increasingly look to the periphery to capture this yield. We would avoid tight names in core Europe, as well as names in the technology and consumer cyclical sectors, including autos and retail. We prefer corporates which still need to deleverage, rather than core IG firms which have an incentive to re-leverage over the next year.

Capital structure. Banks' capital structures will change over 2014. Banks will continue to issue more equity and coco debt, particularly given regulators' increasing focus on the leverage ratio. We think the sweet spot will be LT2 debt. We are very selective on coco and hybrid bonds.

Regions. We prefer European periphery, Semi- core and UK, we are underweight Core Europe like Germany and Scandinavia, US and Emerging Markets. We are positive on Euro-denominated but would reduce Dollar credit. Euro credit will outperform US, in our view, and we forecast 2.2% and 5.1% total returns from European investment grade and high yield, respectively in 2014. We recommend switching to sterling credit for 25-60bp higher spreads and 1% more yield over € bonds for hedging rates and FX.

Duration. We prefer exposure to idiosyncratic and default risk vs systemic risk and volatility. Therefore, we recommend mid-range duration exposure to limit mark-to-market volatility, taking advantage of the positive impact of ECB liquidity and refinancing/tender activity, which is concentrated around the 3-7 year segment. This also allows investors to protect themselves from the risk of rising rates, which we see coming up in the US and the UK.

CDS-Bond basis. The positive basis collapsed to neutral across corporates during the latest rally in CDS, while it remains positive in financials. We think the CDS premium over cash could decline on positive policy risk.

Primary issuance. Issuance will remain strong on a gross basis, but flat or negative on a net basis on bank deleveraging.

Secondary volumes. Banks are de-risking trading and capital markets businesses as well as deleveraging loan portfolios. This means lower secondary volumes.

Trade performance: Open trades

Open trade recommendations

Trade	Start date	End date	Time horizon	Target Gain / Stop Loss	Total return	Revolver publication
European bank senior	6-Jul-12	Open			+1,127bp	H2 2012 Financials Outlook: Banking on Europe
European bank sub	6-Jul-12	Open			+436bp	H2 2012 Financials Outlook: Banking on Europe
Long Corporate Hybrid Bonds	19-Feb-13	Open	6 months	+10/-6	+721bp	Corporate hybrids: another oasis in the yield desert
Short Australia vs Europe	27-Jun-13	Open	6 months	+2/-1	+50bp	When the Fed and China sneeze again…
Buy top 30 deleveraging vs sell top 30 releveraging credits	24-Sep-13	Open	6 months	+4/-4	+317bp	The leverage temptation resurfaces
Buy Yankees	11-Oct-13	Open	6 months	+6/-6	+159bp	Melt-up: Going all-in into year-end
Buy periphery senior bank debt	20-Nov-13	Open	12 months	+6/-6	+338bp	2014 Outlook: Europe's recovery
Buy sub debt of British, French, Dutch, Belgian and Spanish banks	20-Nov-13	Open	12 months	+6/-6	+257bp	2014 Outlook: Europe's recovery
Buy bonds of mid-cap periphery companies	20-Nov-13	Open	12 months	+6/-6	+382bp	2014 Outlook: Europe's recovery
Buy single-A CLO senior tranches	20-Nov-13	Open	12 months	+6/-6	-	2014 Outlook: Europe's recovery

Source: RBS, Bloomberg. Priced as of 14 January 2014
Note: Mid-level spreads are used in performance calculations, and are not reflective of bid-asks for entering/exiting trades

1. Long-short senior bank basket. Long: Societe Generale, Credit Agricole, ING, ABN AMRO, KBC, Lloyds, Nationwide, BBVA, Banco Popular, Banco Sabadell, UniCredit, Banco Espirito Santo. Short: Deutsche Bank, Commerzbank, Rabobank, Barclays, SEB, Nordea, Handelsbanken, Swedbank, Danske Bank.

2. Long-short sub bank basket. Long: Societe Generale, Credit Agricole, ING, ABN AMRO, KBC, Lloyds, Nationwide, BBVA, Caixabank, Banco Popular, Banco Sabadell, UniCredit, Banco Espirito Santo. Short: Deutsche Bank, Commerzbank, Rabobank, SEB, Nordea, Handelsbanken, Swedbank, Danske Bank.

3. Long corporate hybrids.

4. Short Australia vs Europe. Buy protection on iTraxx Australia vs iTraxx Europe.

5. Buy top 30 deleveraging vs sell top 30 releveraging credits.

6. Buy Yankees.

7. Buy senior debt of periphery banks.

8. Buy sub debt of British, French, Dutch, Belgian and Spanish banks.

9. Buy mid-cap high yield periphery companies. We are removing our long on Piaggio given that the bond has a call date within the next 12 months and offers little upside if called.

10. Buy single-A CLO senior tranches.

Trade performance: Closed trades

Closed trade recommendations (2012-present)

Trade	Start date	End date	Time horizon	Target Gain / Stop Loss	Total return	Revolver publication
Buy a basket of lower tier 2 callable bonds with low market implied call probabilities (Credit Agricole, Intesa, and Lloyds).	23-Jan-12	10-Feb-12	3m	+7.5/-7.5	+721bp	Buy senior bank bonds and dirt-cheap sub bonds
Buy protection on Portuguese bank 5-year CDS. Sell protection Portuguese corporate 5-year CDS. (1x:1.1x ratio).	6-Feb-12	22-Feb-12	6m	+6/-6	+615bp	The LTRO and the Portuguese Threat
Sell protection on an equally weighted basket of US bank 5-year senior CDS. Buy protection on an equally weighted basket of 5-year senior CDS.	14-Feb-12	30-Mar-12	6m	+3/-3	+321bp	European banks: too good to be true
Buy 5-year senior CDS protection on Intesa, Societe Generale, and UniCredit. Buy a basket of cash covered bonds on the same names.	17-Feb-12	5-Apr-12	6m	+4/-4	+299bp	Liquidity today brings subordination tomorrow
Buy low-price, low-coupon bonds from cash rich firms.	5-Mar-12	12-Oct-12	3m	+3/-3	+294bp	The refinancing race is on: Buy bond tender candidates.
Buy protection on an equal weighted basket of Air France/KLM, Carrefour, Deutsche Post, IAG and Ineos. Sell protection on iTraxx Xover	12-Mar-12	2-Jul-12	6m	+2.5/-2.5	+40bp	After PSI: The threat of rising oil prices
Buying protection on BBVA, Caixabank and Santander vs selling protection on US and UK banks	19-Mar-12	29-Mar-12	3m	+2/-1	+208bp	Spain: Structural challenges deeper than liquidity can solve
Buy Bank of Ireland senior unsecured 4.625% € 2013 bonds	4-Apr-12	30-Oct-12	12m	+5/-5	+715bp	Ireland: The Celtic Tiger is coming back on track
Buy protection on BBVA 5-year senior CDS and sell protection on Santander	20-Apr-12	22-May-12	6m	+2.5/-2.5	+147bp	Stress testing Spain's champions: Sell BBVA vs Santander
Sell protection on Societe Generale 5-year senior CDS	30-Apr-12	21-Aug-12	6m	+3/-5	+325bp	France: Election fears overdone, long Societe Generale
Sell protection on iTraxx Xover. (Removed short leg of buying protection on iTraxx Sub Financials on 2-Jul-12.)	17-May-12	06-Aug-12	4m	+3/-2.5	+323bp	Greece: The fallout through the banking system
Short Australian banks against US corporates	24-May-12	31-Jul-12	6m	+1.5/-2	-229bp	The global repercussions of the Eurozone crisis
Sell protection on buy protection on Spain (1x:1x ratio)	1-Jun-12	29-Jun-12	6m	+3.5/-3.5	+336bp	Spain's near death experience
Buy short-dated bonds of downgrade-resilient periphery corporates. Sell downgrade-exposed periphery corporates	13-Jul-12	21-Aug-13	6m	+2/-2	+20bp	Investing on the edges of the market
Sell 5-year senior CDS protection on UniCredit and buy 5-year CDS protection on BBVA	20-Jul-12	6-Aug-12	6m	+3/-3	+205bp	Spain needs surgery, Italy therapy
Long European HY Corporates vs Xover	6-Aug-12	30-Oct-12	6m	+1.5/-1.5	+50bp	High yield: Still a buy, but be selective
Sell 5-year CDS protection on Fiat and buy protection on Peugeot and Renault	28-Aug-12	11-Sep-12	6m	+1.5/-1.5	+322bp	The Silk Highway: Long Fiat vs Peugeot & Renault
Short Spain vs Long Xover	3-Sep-12	30-Apr-13	6m	+2/-5	+61bp	Same problems, new mistakes: Sell Spain
Short Investment banks vs Long Commercial banks	3-Oct-12	24-Jun-13	6m	+2/-2	+14bp	Bank to basics: The future of investment banking
Buy short-dated Spanish sovereign bonds; sell short-dated BBVA senior bonds	12-Oct-12	14-Jan-14	6m	+1.5/-1.5	-81bp	Tail risk is dead. Long live tail risk
Buy BESPL 5.625% 2014 and sell PGB 3.6% 2014	17-Oct-12	08-Nov-12	6m	+3/-3	+291bp	Portugal: Long Banco Espirito Santo vs sovereign
Buy BASQUE 4.15% 2019, NAVARR 5.529% 2016, CANARY 2% 2016, CASTIL 3.85% 2016 and MADRID 6.213% 2016	29-Oct-12	7-Feb-13	6m	+16/-7	+1394bp	The Spanish regions: Mirage and oasis in a yield desert
Short LT2 bonds ISPIM 5% 2019, UCGIM 5.75% 2017, BPIM 6% 2020 and MONTE 5% 2020 vs Long iTraxx SubFin	10-Dec-12	28-Feb-13	3m	+5/-3	+115bp	Italy: Brace for political risk
Long Periphery Corporates (Cash bonds)	8-Jan-13	01-Oct-13	12m	+6/-4	+325bp	Top Trades 2013: Making money in a yield desert
Long Periphery Banks	8-Jan-13	19-Nov-13	12m	+6/-4	+487bp	Top Trades 2013: Making money in a yield desert
Sell UK consumer bonds vs iBoxx 7-10 year £ BBB	29-Jan-13	16-Apr-13	7m	+3.5/-3.5	+200bp	The UK: slowly losing safe-haven status
Short Italian bank sub vs Xover	14-Mar-13	28-Mar-13	6m	+2/-2	+472bp	The State of Credit Markets
Buy BESPL 2015 5.875% and CXGD 2015 5.625%	19-Apr-13	01-Oct13	6m	+3/-4.5	+104bp	Buy Portugal
Buy Mid Cap Periphery HY	23-May-13	19-Nov-13	6m	+6/-6	+438bp	High yield: Small is beautiful
Sell Monte 5% 2020 LT2	10-Jul-13	04-Oct-13	12m	+10/-10	+551bp	EC bail-in rules: It's time for a haircut
Buy Protection on iTraxx Xover	01-Oct-13	11-Oct-13	1m	+1.5/-1.5	-117bp	Banking union: The moment of truth for Europe's banks
Long sub debt of French, Dutch and British banks	11-Oct-13	19-Nov-13	6m	+4/-4	+245bp	Melt-up: Going all-in into year-end
Long European vs US high yield	8-Jan-13	12-Dec-13	6m	+2/-2	+5bp	Top Trades 2013: Making money in a yield desert

Source: RBS, Bloomberg. Note: Mid-level spreads are used in performance calculations, and are not reflective of bid-asks for entering/exiting trades

Recent research

Italy: Time for bank reform - 15 January 2014. Positive signs are finally emerging in Italy: growth is returning, the government is more stable after Berlusconi's exit and it is moving towards some reforms, for example the electoral system. But as risk premia in financial markets decline, complacency remains a threat. Italy lags Spain and Ireland on reforms so far – it is now the time to press on, with reforms of the electoral system, labour markets and crucially, banks. Italy's banking sector problems are not as large as Ireland's were in 2010 or Spain's in 2012, but they are still holding back the recovery. A comprehensive bank restructuring and transparency programme, and even a bad bank, could reap large benefits in Italy, as they did in Spain and Ireland. In this piece we look at the kinds of bank reforms Italy could do.

2014 Top Trades: From melt-up to diet credit - 13 January 2014. The melt-up in credit and risk assets which we anticipated at the end of 2013 has exceeded our expectations. Now that risk premia have narrowed to pre-crisis levels investors are left with the prospect of modest returns from here. However, we think it is too early to get short credit, and that spreads will continue to narrow slightly over the course of 2014. European credit has now become something like a diet beverage: nothing too exciting but we see limited downside risks. 2014 is the year of diet credit. In this world of sugar-free bonds, there are however small niches which still offer value. These are the areas we target in our top trades for 2014, which we initiated in the second half of 2013 and reiterate today.

2014 Outlook: Europe's recovery - 20 November 2013. The tide is turning. Europe's turnaround this year will become a recovery in 2014, as core countries increase spending and the ECB starts its banking sector clean-up. European bonds still look the best in fixed income globally. But there are risks, too. A lot of good news has been priced in already. Governments are complacent and lagging on reforms, and releveraging and regulation may hurt bonds. But these risks are smaller, in our view, than in other markets. The result of 5 years of QE is that asset bubbles are emerging in the US and UK, and deflating in EM. Investors should stay away from these areas of return-free risk and stick to Europe's periphery, high yield, bank bonds and loans..

The Bank Job: European banks to the test - 25 October 2013. The ECB's comprehensive assessment of bank balance sheets will be positive for spreads, in our view. It will achieve its aim to increase transparency, repair weak banks and build confidence in the system. The examples of Ireland and Spain have shown that transparency is key to reducing risk premia and bringing capital back to the system. The AQR and ECB-EBA stress tests will make this happen on a broader scale. We expect the tests to confirm that large banks are well-capitalised: they already have capital ratios of 12% on average. We calculate that around 15-20 periphery banks will fail the tests. However, these are small and not systemic, at just 4% of bank assets. We continue to be long senior debt in the periphery and sub in France, Holland and the UK.

The new hybrids: Stick to vintage - 15 October 2013. Hybrids have been both dangerous monsters and wonderful creatures, in mythology. The hybrid bond market has doubled over the past year to €40bn, on rising demand and issuance from periphery companies. But are the new hybrids really worth it, or do they expose investors to unnecessary complexity and risks? Our analysis shows vintage, low-beta hybrid bonds carry an attractive premium to senior bonds. The new issues instead, have a thinner premium and have become expensive, on strong demand for high nominal yields. We are long the Euro hybrids issued by RWE, EnBW, Suez, Vinci, OMV, Dong Energy, Veolia and Linde as well as Veolia's Sterling hybrid.

Melt-up: Going all-in into year-end – 11 Oct 2013. European credit will rally strongly into year-end after a US debt ceiling deal, in our view. An improving recovery in Europe, subsiding political risks, increased transparency in the banking sector from the

upcoming ECB-EBA review and stress tests, as well as negative net supply will boost risk assets into year-end. We stay long and reiterate our buy recommendations for areas of the market we think are attractive: senior periphery bank debt, sub debt of Dutch, French and UK banks, corporate hybrids, corporates which are deleveraging, mid-cap HY firms and Dollar bonds from European issuers.

Banking union: The moment of truth for Europe's banks – 01 Oct 2013. The European banking system continues on its slow road to recovery. Eurozone banks have cut €3.3tn assets since May 2012 and raised capital to meet Basel III standards. Yet European credit markets remain fragmented and lending activity has not recovered. The ECB's upcoming Asset Quality Review aims to address this issue and reinvigorate confidence in the strength of the system. Whether or not Europe's nascent recovery will continue will depend on this. However, the AQR and stress tests will likely also unveil where the problems still lie: among the mid-tier banks in Italy and Spain. These banks' junior bondholders could face burden-sharing to replenish capital going forward, and in the meantime periphery firms will continue to struggle to get credit.

The leverage temptation resurfaces – 24 Sep 2013. When capital is cheap, leverage becomes tempting. The cost of capital has fallen over the past year, making borrowing and investing more feasible for CFOs. We estimate 40% of European firms and around 75% of US firms could now reduce their after-tax cost of capital by increasing debt. But while US firms are already engaging in M&A and LBO activity, European corporates remain very conservative, mindful of the risks of lower ratings. But with positive growth in 2014, releveraging risk could gradually come to Europe, too. The best way to position, in our view, is to be in the areas of credit markets which are still wide and need to deleverage more: financials and periphery.

German elections: More Merkel, more Europe? – 9 Sep 2013. The German economy is on a strong track to recovery. Unemployment is at a 20-year low, inflation is subdued while house prices and wages are going up, and GDP has grown more over the last 5 years than in almost every other country in Europe. The electorate mostly credits Merkel for this, and the SPD has not convinced voters that they offer a better alternative. As a result, we think that Merkel will win elections on September 22, with a 61% probability that the current CDU/CSU and FDP coalition remains in power. This would result in a continuation of current policies, with Germany willing to be slightly more flexible in enforcing reforms in the periphery. On the other hand, a CDU/CSU + SPD grand coalition (30% probability) would be more positive.

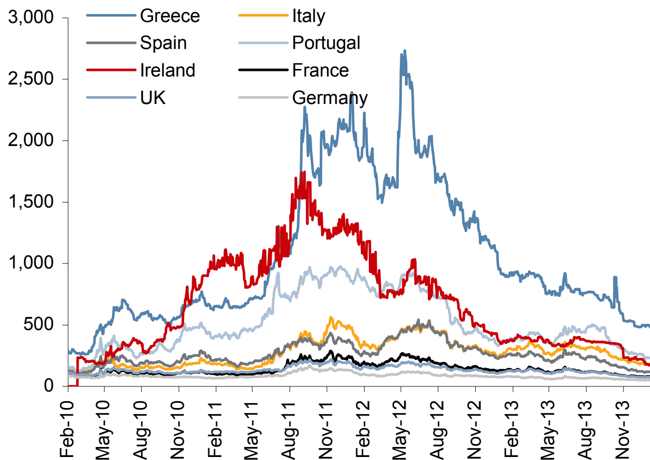
Growth, rising rates and deleveraging risk – 3 Sep 2013. We are seeing signs of a gradual turnaround we anticipated in our H2 Outlook last May. But along with the stabilisation in Europe's economy come rising bond yields, bank deleveraging and continued weakness in emerging markets. In addition, Germany will soon go to elections, Greece and Portugal will face more reviews, and the ECB will approach the start of its bank stress tests. Can credit markets hold?

Europe's turnaround is coming – 21 Aug 2013. We are seeing signs of a gradual turnaround in Europe's economy, as we anticipated in our H2 Outlook in May. Recent Q2 growth data supports this view across both core and periphery. A recovery, albeit slow, should benefit corporate earnings and help periphery countries to stabilise their debt. The major macro risks in Europe are under control, in our view, although a further slowdown in EM or rates rising on Fed tapering could still shake bond markets. Micro risks remain high in some areas: mid-tier banks and sovereign-dependent firms in the periphery will continue to struggle. We stay long mid/low-duration, high-spread credit like financials, high yield, hybrids and periphery exporters.

Credit Markets Watch

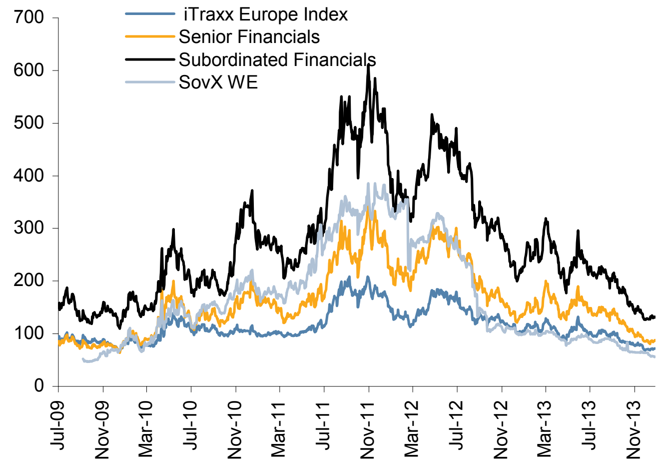
Spreads, sovereign risk, primary and secondary markets

Country average corporate credit spreads, bp



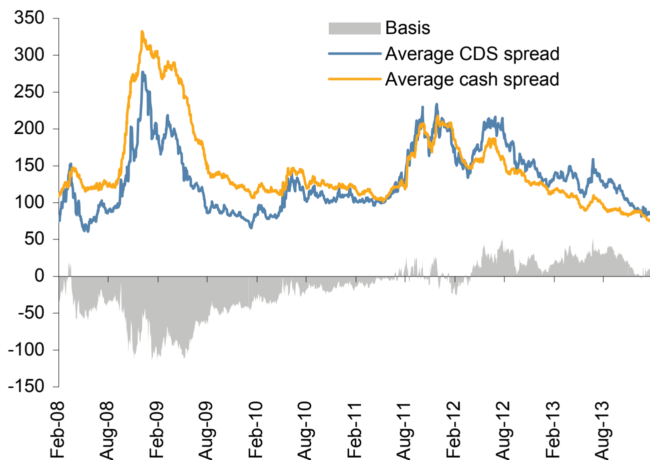
Source: RBS Credit Strategy, Bloomberg

iTraxx index spreads, 5-year on-the-run, bp



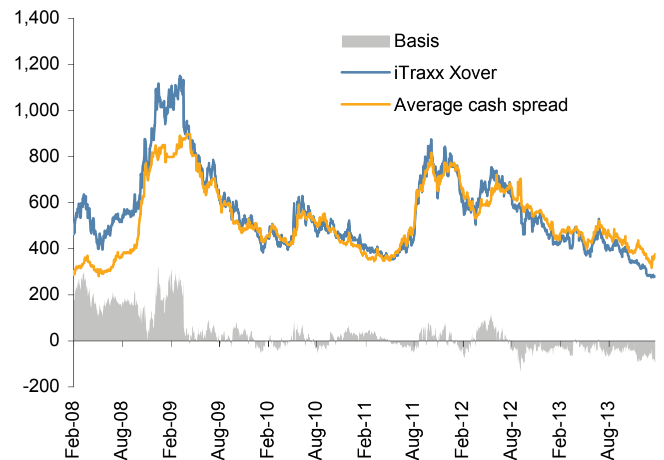
Source: RBS Credit Strategy, Bloomberg

iTraxx Main cash and CDS spreads and basis, bp



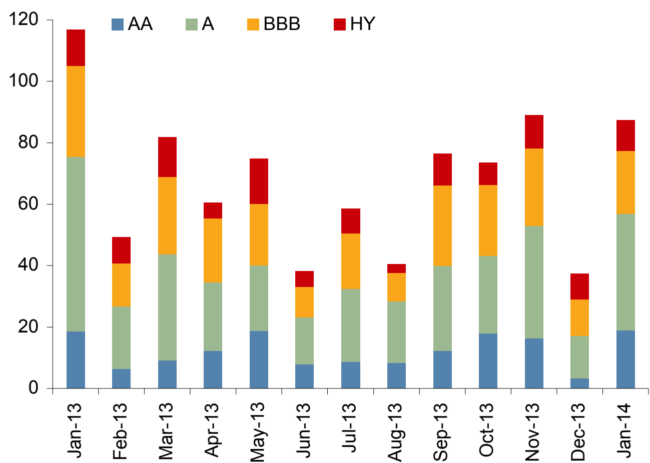
Source: RBS Credit Strategy, Bloomberg

iTraxx Xover cash and CDS spreads and basis, bp



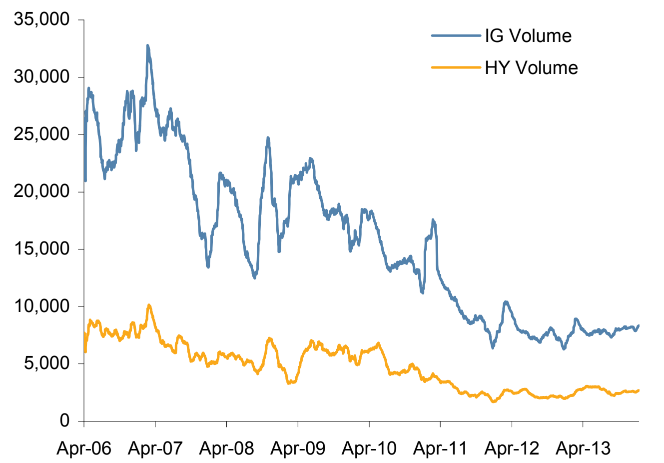
Source: RBS Credit Strategy, Bloomberg

Investment grade and high yield issuance, €bn



Source: RBS Credit Strategy, Bloomberg

TRACE 2-month trailing average daily trading volumes, $m

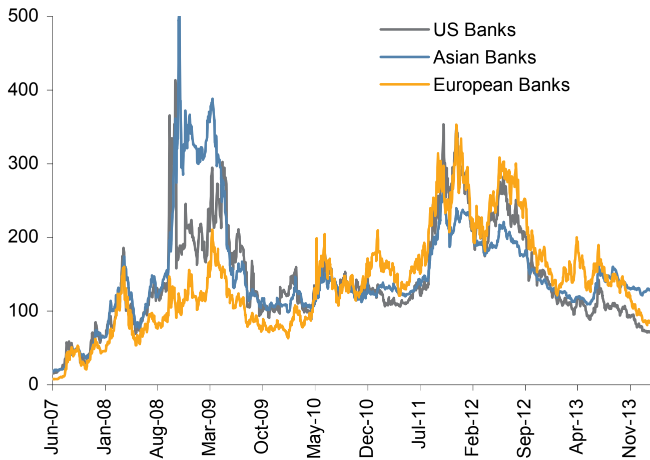


Source: RBS Credit Strategy, Bloomberg

Financial Stress Watch

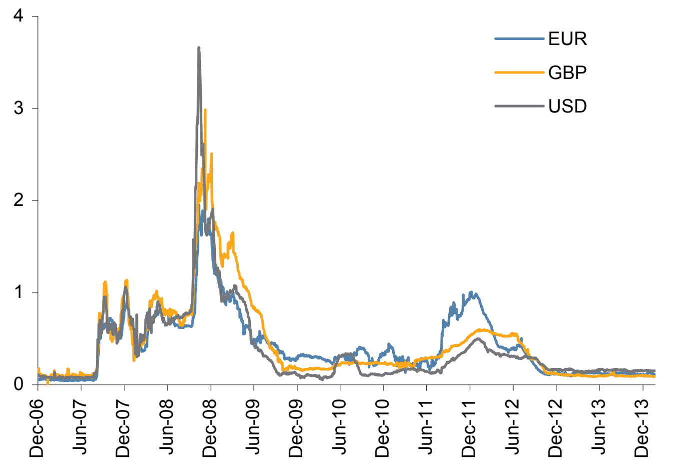
Bank spreads and risk in the financial system

Average bank spreads by region, bps



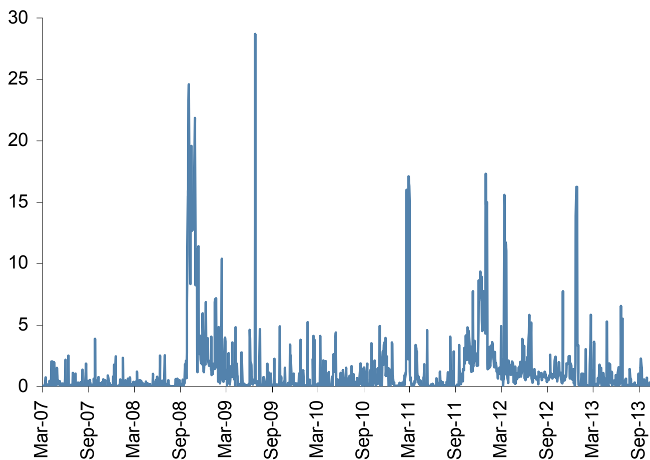
Source: RBS Credit Strategy, Bloomberg

Libor-OIS spreads, %



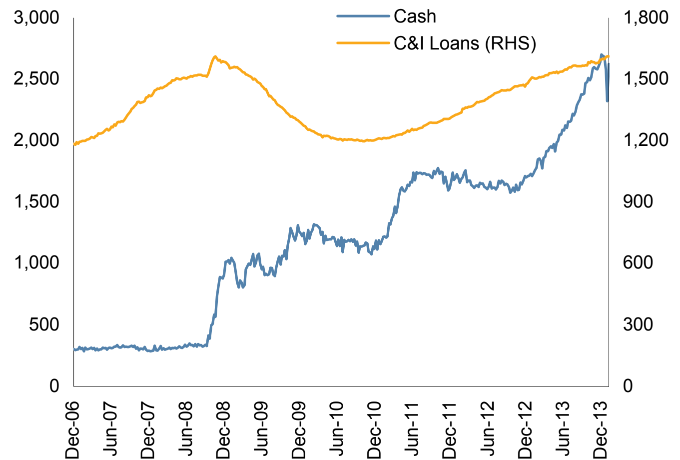
Source: RBS Credit Strategy, Bloomberg

Use of the ECB marginal lending facility, €bn



Source: RBS Credit Strategy, Bloomberg

Cash and C&I loans on banks balance sheets, $bn

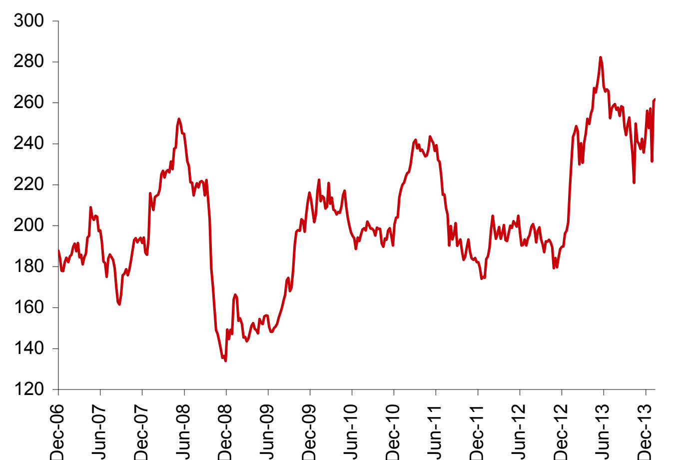


Source: RBS Credit Strategy, Bloomberg

US primary dealer corporate bond inventories, $bn

Source: RBS Credit Strategy, Bloomberg

US commercial paper outstanding from foreign issuers, $bn



Source: RBS Credit Strategy, Bloomberg

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