Citi Research

Developed Market Rates

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Europe

Euro SSA and Covered Bond Strategy

Overview and opportunities: German agency and covered bonds

- **We remain defensive:** We detail core characteristics and key issuers within the German agency and covered bond markets. In general, demand for high quality assets is likely to remain firm given ongoing EMU turbulence. We focus more on relative value within each market sector given the generally low yield environment in core rates.
- **Strategies in German agency curves:** The rally in core government bond markets, given EMU event risk, has driven some agency spreads out of ranges established over recent months. The belly of KfW's benchmark spread curve, for example, looks historically attractive.
- **ESM issuance:** A key consequence of the Cyprus situation is the prospect of issuance from European bailout facilities. It is likely the ESM will be involved in the €10bn external financing to the sovereign.
- **Covered bonds to outperform senior unsecured:** We expect covered bonds to outperform senior unsecured bank bonds over the longer term. Peripheral tier 1 (and some tier 2) covered bonds should continue to trade rich to government bonds albeit these segments are likely to remain exposed to higher volatility than core covered bonds.
- **New covered bond issuer on the brink:** Supply from Hypo Landesbank Vorarlberg in coming weeks would mark the first batch of issuance from the Austrian covered bond market in 2013.
- **Covereds, Cyprus and CRD IV:** Cyprus and recent bank restructurings make it increasingly clear what will be implemented regarding CRD IV: Covered Bonds seem to be one of the few debt instruments that are not seen as bail-inable debt.
- **Supply:** Euro denominated agency and supranational issuance totaled €12bn in March and stands at over €55bn YTD. Covered issuance in March was €4.5bn, and stands at €29.7bn YTD.

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

Germany's agency and covered bond market

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Overview and opportunities

The tone in the European SSA and covered bond market is largely being set by the event risk in Europe. We continue to see these sectors, with their generally high credit quality and sound fundamentals, as havens in times of turbulence. The Cyprus situation continues to serve as a reminder that European policy making remains somewhat unpredictable. Although, the (finally) agreed measures conform to a more conventional bail-in model of bank restructuring, subsequent comments by finance ministers, and the precedent the deal could set, mean that the main toolkit of the euro area crisis management is clearly still evolving.

We remain defensive

In light of this, we remain defensive and continue to advocate relative value strategies and moving up in quality. The German agency and pfandbrief market is the largest geographical segment within the broader European SSA and covered bond universe, with generally high asset quality and relatively good liquidity. We detail market characteristics below, who the main issuers are and where current opportunities might lie. In general, we continue our theme of buying on dips, especially in good quality credits where the underlying rally in Bunds has left some benchmark spreads relatively wide compared with recent history.

The German agency sector – €700bn in bonds outstanding

As a defensive sector, the German agency market is the largest agency market in Europe, at over €700bn in bond debt outstanding. The universe of German agencies will differ depending on the definition used (especially as many SSA segments tend to be somewhat fragmented). Below we detail key characteristics of some of the main credits that issue in capital markets (Figure 1). Details comparing KfW to supranationals can be found in our similar table *Euro SSA Strategy - An Introduction to Core European SSA Issuers*.

Figure 1. The German Agency Market (Selected Issuers Active in Capital Markets)

Ticker	Issuer	Agency Type	Established	Guarantee Structure	Moody's Rating	S&P Rating	Total Assets (€bn)	2012 Bond Issuance (€bn)	Bond Debt Outstanding (€bn)
KFW	KfW Bankengruppe - KfW	Germany's leading development bank	1948	Explicitly guaranteed by Germany since 1998. 80% owned by Federal Republic, 20% by Federal States	Aaa (Neg)	AAA (Stable)	495 (2011)	78.7	376
NRWBK	NRW.Bank	Development bank for North Rhine-Westphalia	2004	"Explicitly guaranteed by the State of North Rhine-Westphalia"	Aa1 (Neg)	AA- (Stable)	152.5 (2011)	14.1	82
LBANK	Landeskreditbank Baden-Wuerttemberg - Foerderbank	State development agency of Baden-Wurttemberg	1998	"Explicit guarantee of the Federal State of Baden-Wurttemberg"	Aaa (Neg)	AAA (Stable)	~72 (2010)	9.4	33
BYLABO	Bayerische Landesbodenkreditanstalt	Bavarian development bank promoting housing and urban development	1884,later renamed in 1949	"Free State of Bavaria is the unconditional, permanent and irrevocable guarantor of all liabilities entered into by BayernLabo"	Not rated	AAA (Stable)	23 (2011)	1.1	5
BAYLAN	LfA Foerderbank Bayern	Development bank of the Free State of Bavaria	1951	"Full and unlimited liability from the Free State of Bavaria for the LfA's commitments"	Aaa (Neg)	Not rated	22 (2011)	0.2	8
IBB	Investitionsbank Berlin	Development bank of the Federal Land of Berlin	1993, latest reorg in 2004	Refinancing guarantee by the Federal Land of Berlin	Not rated	Not rated	20.2 (2011)	0.2	7
WIBANK	WIBank	Development bank (housing, urban, agriculture, education, employment); State of Hessen	2009	"Direct statutory guarantee from the State of Hessen"; explicit, unconditional and irrevocable for all liabilities	Not rated	AA (Stable)	9.6 (2012)	0.0	0.5
FMSWER	FMS Wertmanagement	Public law entity aimed at winding down €175.7bn asset portfolio from HRE (at time of transfer)	Assets transferred Oct 2010	Loss compensation obligation of the German Financial Market Stabilisation Fund. FMS-WM is supervised by the Federal Agency FMSA and by BaFin.	Aaa (Neg)	AAA (Stable)	342 (2011)	30.6	101
ERSTAA	Erste Abwicklungsanstalt	Public law entity mandated as a winding-down agency	Dec. 2009	Legal supervision by FMSA; liability mechanisms anchored in its Charter. Largest shareholder is North Rhine-Westphalia	Aa1 (Neg)	AA- (Stable)	79 (2012)	13.8	50

Source: Investor Presentations, S&P, Moody's, Bloomberg, Dealogic DCM Analytics, Citi Research

In general, there are three broad strands to the German agency market:

- **German development banks / agencies** (such as KfW)
- **Development banks associated with individual Federal States** (such as NRW.Bank)
- **Agencies established to wind down particular asset portfolios** (such as FMS)

Guarantee structures: The nature of the guarantee is an important component in assessing credit quality (as seen by the rating agencies) and secondary market performance. Overall, the stronger the guarantee and the closer the credit is to the guarantor, the stronger the relationship both in terms of rating and market levels.

Guarantees, ratings and spreads: For example, KfW has an explicit guarantee in German law from the Federal Republic and is rated AAA/Aaa in line with the underlying sovereign. NRW.Bank is explicitly guaranteed by North Rhine-Westphalia and has its rating equalized to AA-/Aa1. FMS on the other hand is ultimately owned by the German sovereign, but does not have an explicit guarantee akin to KfW. Therefore, FMS is also rated AAA/Aaa but tends to trade with a pick-up to KfW (which in general has had the tightest spread among all German agencies).

Below, we provide a brief overview of three of the larger issuers detailed in Figure 1 for the purposes of relative value analysis and trading strategies.

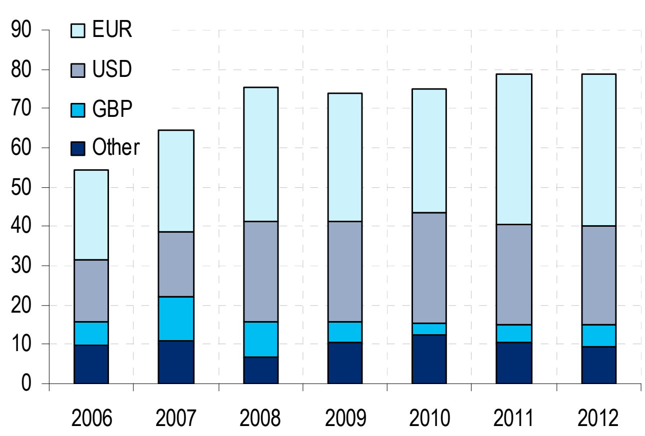
(1) KfW – Germany's leading development bank

Functions: Kreditanstalt fuer Wiederaufbau is Germany's leading development bank founded in 1948. Specific functions are documented in the "KfW Law" and allow for, inter alia, promotional finance in sectors ranging from SMEs, housing, infrastructure, technology and internationally agreed programs. KfW's balance sheet is around €500bn. It is owned 80% by the Federal Republic and 20% by the Federal States. Since 1998, it has benefited from an unconditional and explicit guarantee. Further details can be found here.

Spreads have widened due to the strong performance of Bunds

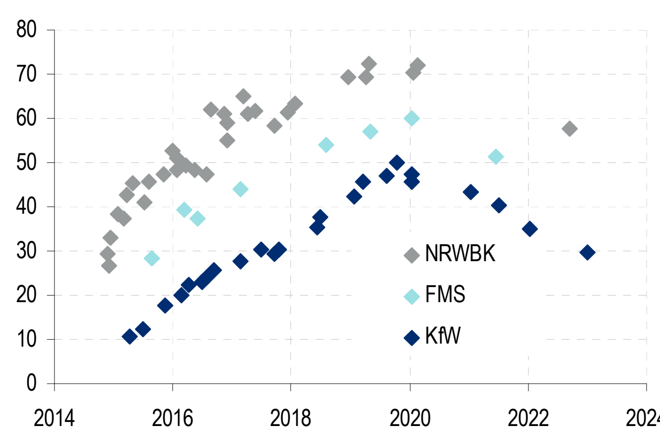
Capital markets: KfW is to issue €70bn-€75bn across all currencies in 2013 (similar to 2012, Figure 2). EUR and USD denominated supply typically constitutes 75%-80% of gross issuance. KfW has an established benchmark programme.

Figure 2. KfW Gross Issuance (All Currencies €bn)



Source: Citi Research, KfW

Figure 3. German agency € curves (spreads to Germany, bp)



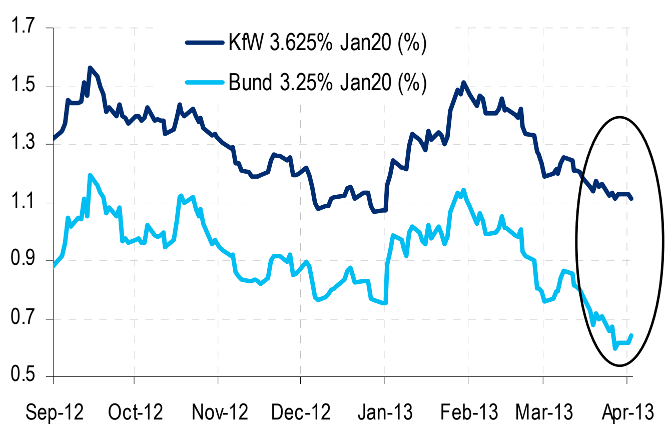
Source: Citi Research. Bloomberg

KfW remains the safe haven of choice

Secondary market: The explicit guarantee is a key driver behind KfW's rating and relatively tight trading levels. More broadly, we continue to see relative value in the belly of German agencies (Figure 3). Compared with underlying Bund yields, spreads tend to be greatest in the 6yr-8yr part of the curve. KfW currently offers around 40bp-50bp (spreads to Germany) in this sector and has generally cheapened since the start of the year. This credit tends to trade with the tightest spread to the sovereign among the German agencies. Fundamentally, it benefits from an unconditional and explicit guarantee from the German government, has generally high asset quality and a long established tradition of market access issuing in benchmark size across various maturities and currencies (*An Introduction to Core European SSA Issuers*).

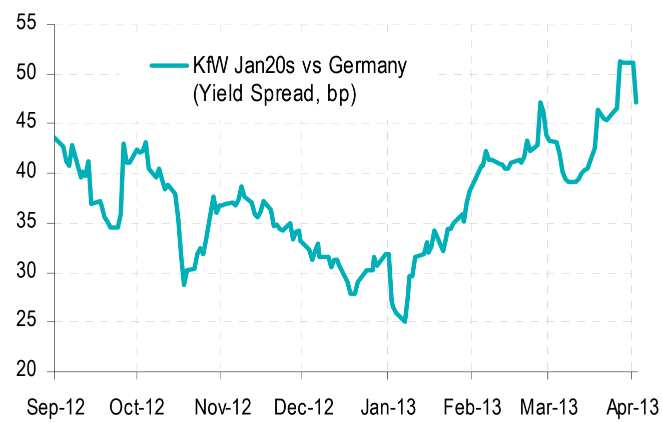
Strategy view: Relative to Germany, KfW provides a good example of cheapening in spreads – not because of idiosyncratic credit drivers, but rather due to the strong rally in Bunds (Figure 4, Figure 5). Spreads have clearly broken out of recent ranges to levels where buying interest is likely to emerge, in our view. There is already some evidence of retracement of the recent move wider in benchmark spreads.

Figure 4. Outperformance of German bonds relative to agencies….



Source: Citi Research, Bloomberg

Figure 5. …has seen some differentials move firmly out of ranges



Source: Citi Research, Bloomberg

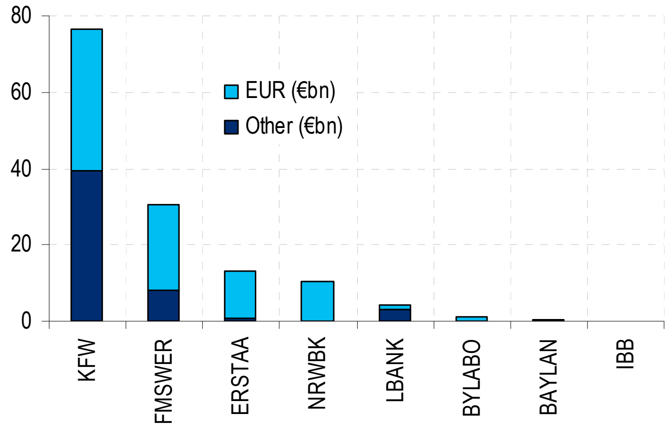
(2) FMS Wertmanagement – wind-down agency

Functions: Unlike the other entities within the German agency sector, FMS Wertmanagement is not a development bank. It is a public law vehicle originally established in July 2010 with the specific purpose of winding down the assets of Hypo Real Estate. In October 2010, €175.7bn of assets were transferred to FMS.

Government support: FMS is administered by FMSA which itself is supervised by the German finance ministry. Since its creation, there have been several legal enhancements strengthening its connection with the strong credit quality of the German sovereign (such as the FMS Fund Act and the loss compensation obligation of SoFFin). This is acknowledged by the rating agencies who rate FMS AAA/Aaa in line with Germany. Due to such structural differences, FMS tends to trade with a slight spread pick-up to KfW (Figure 3).

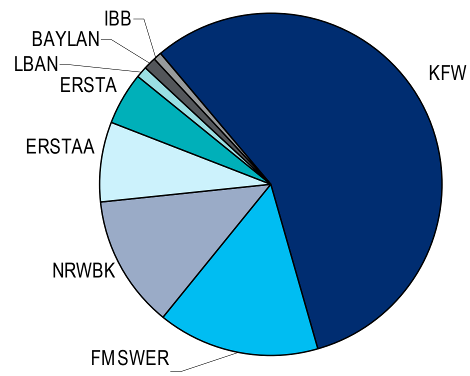
Capital markets: FMS Wertmanagment is the second largest issuer within the German agency market (its targeted annual funding volume is €20bn-€25bn). The broader view of German agency issuance is shown in Figure 6 and Figure 7.

Figure 6. 2012 Issuance Volumes (All Currencies, €bn)



Source: Citi Research, Investor Presentations, DCM Dealogic Analytics.

Figure 7. Relative Proportions of German Agency Debt Outstandings



Source: Bloomberg DDIS, Citi.

(3) NRW Bank - a State development bank

Functions: NRW.Bank is the development bank of the State of North Rhine-Westphalia supervised by Bundesbank and BaFin. Its private sector businesses focus on housing, developments & protection policies within the environment and education and SME promotion. It also operates within the public sector and co-operates with KfW and EIB.

State guarantee: NRW Bank is solely owned and explicitly and unconditionally guaranteed by the State of North Rhine-Westphalia. Its rating (AA-/Aa1) is therefore equalized to its guarantor by the rating agencies. The lower rating accounts, in part, for the spread differential with other agencies such as KfW for example.

Markets: NRW Bank targets a 2013 funding volume of €10bn-€13bn in line with 2012 making it one of the larger State development banks in Germany.

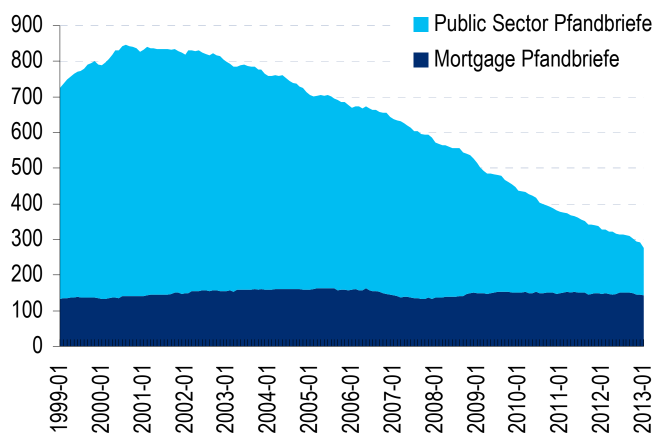
In general, the larger German agencies can represent a relatively liquid alternative to Bunds. In addition, the German pfandbrief market is also one of high asset quality and relatively strong fundamentals.

The German Pfandbrief market – further shrinkage ahead

The growing significance of mortgage pfandbriefe

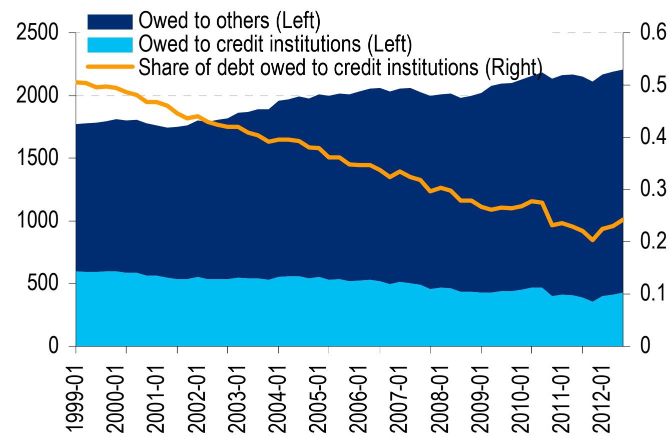
We see two important themes within the German pfandbrief market. On the one hand, the importance of public sector pfandbriefe appears to be waning. This year marked the first time that the amount outstanding of mortgage pfandbriefe was larger than the amount of public sector backed bonds (Figure 8). Many German banks are withdrawing their activities of public sector financing mainly because of a changing regulatory environment and its nature as a low margin business. On the other hand, the mortgage pfandbrief market continues to develop. This should also be supported by a German property market with new constructions picking up slowly since 2009 against the backdrop of a low interest environment and the increasing affordability of home ownership (*Covered Bond Strategy Feb 2013*).

Figure 8. Gross volume of outstanding Pfandbriefe, €bn



Source: Bundesbank, Citi Research

Figure 9. Central, state and local government debt, €bn, as of 07/12



Source: Bundesbank, Citi Research

Net shrinkage ahead, while…

In 2013, there is €42bn in benchmark pfandbrief redemptions. Year to date, issuance stands at €5.125bn (including Commerzbank's SME backed covered bond). Going forward in 2013, we expect an additional €12bn in benchmark pfandbrief supply. This results in a net shrinkage of €24.875bn. We expect ship and aircraft pfandbriefe as well as SME structured covered bonds to continue to play a niche role in the future. In addition, the relative importance of mortgage pfandbriefe should continue to rise.

Traditional issuers exit, new ones are on the brink

…new issuers can be expected…

Over the last four years, benchmark issuance activity has been undertaken by several issuers with the increasing involvement of commercial banks (e.g. Deutsche Bank, ING Diba). The following table displays a selection of the most active issuers from Germany that are likely to return in the upcoming months. Apart from these institutions, there might be potential new issuers and comebacks. On the one hand, Sparkasse Koeln Bonn plans to return in H1 (having last issued in 2008), while Commerzbank might be finished with its preparations to issue mortgage pfandbriefe by the end of this year. On the other hand, Natixis Pfandbriefbank AG has held a pfandbrief issuance licence since last year and plans to refinance mainly German and French commercial mortgages by issuing mortgage pfandbriefe.

…and various traditional issuers have left the market

The German market has also seen some of the larger issuers leave. HYPFRA (former Eurohypo), the biggest pfandbrief issuer, is in wind-down mode. Separately, Dexia Kommunalbank, Westimmo and WestLB are further covered bond issuers which are unlikely to come back to the primary market.

Figure 10. Selection of most active German Pfandbrief issuers

Ticker	Issuer	Ownership structure	Assets (EURmn)	Liabilities (EURmn)	OC,%	Share Residential	Share PIIGS	Rating Moody's	Rating S&P
AARB	Aareal Bank	Free floating equity; biggest equity holders (6.9%): Bayerische Beamten- und Lebensversicherung AG, Swiss Life AG	PS: 3176	PS:2860	PS: 11%	--	PS: 7%	AAA (Fitch)	--
			M: 11820	M: 9555	M: 24%	M: 9%	M: 19%	AAA (Fitch)	--
BHH	Berlin-Hannoversche Hypothekenbank	All shares are held by Landesbank Berlin	PS: 5438	PS: 4980	PS: 9%	--	PS: 0%	PS: Aa1	--
			M: 15290	M:12173	M: 26%	M: 24%	M: 0%	M: Aa1	--
DB	Deutsche Bank	Free floating equity; biggest equity holder (5.1%): BlackRock Inc.	--	--	--	--	--	--	--
			M: 5818	M:4025	M: 45%	M: 91%	M: 0%	M: Aaa	M: AAA
DHY	Deutsche Hypothekenbank	All shares are held by Norddeutsche Landesbank (NordLB)	PS: 12578	PS: 11995	PS: 5%	--	PS: 9%	PS: Aa2	--
			M: 9747	M: 8157	M: 19%	M: 15%	M: 3%	M: Aa2	--
PBBGR	Deutsche Pfandbriefbank	The institution is a 100% affiliate of Hypo Real Estate Holding AG	PS: 32661	PS: 29122	PS: 12%	--	PS: 6%	PS: Aa1	PS: AA+
			M: 20233	M:14250	M: 42%	M: 21%	M: 4%	M: Aa1*-	M: AA+
HSHN	HSH Nordbank	85.4%: City State of Hamburg & State of Schlewsig-Holstein 5.3%: Saving Banks association of Schleswig-Holstein 9.3%: Nine trusts advised by J.C. Flowers & Co.LLC	PS: 7042	PS: 5237	PS: 34%	--	PS: 0%	PS: Aa1*-	--
			M: 5189	M: 4244	M: 22%	M: 25%	M: 0%	M: Aa1*-	--
MUNHYP	Muenchener Hypothekenbank	Member of the German cooperative sector: 36.5% ccoperative primary banks, 1.7% Other FinanzGruppe members, 61.8% customers and other members	PS: 7896	PS: 7526	PS: 5%	--	PS: 3%	PS: Aaa	--
			M: 18245	M: 15135	M: 21%	M: 78%	M: 0%	M:Aaa	--
HVB	Unicredit Bank AG	Fully owned by Unicredit SpA	PS: 8787	PS: 6894	PS: 27%	--	PS: 0%	PS: Aaa	PS: AAA
			M: 26494	M: 20494	M: 29%	M: 30%	M: 0%	M: Aa1	--
WLBANK	WL Bank	91%: WGZ Bank, 5% Stiftung Westfaelische Landschaft, 4% Cooperative Banks	PS: 19205	PS: 16813	PS: 14%	--	PS: 2%	--	PS: AAA
			M: 12131	M: 10269	M: 18%	M: 83%	M: 0%	--	M: AAA

Source: Issuers, Citi Research; M= Mortgage, PS = Public Sector

Cover pool changes have occurred

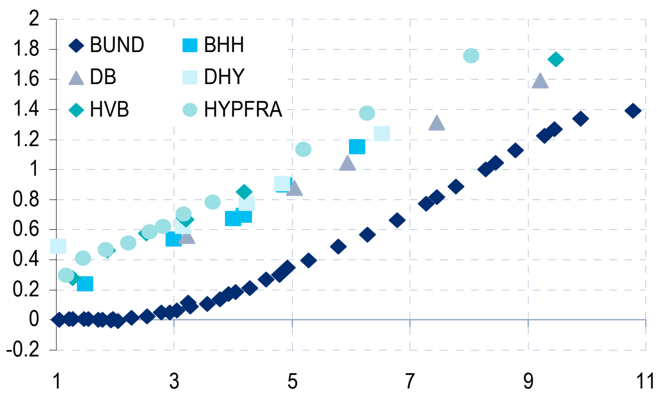
Over the last two to three years, some pfandbrief issuers have transitioned their cover pool composition significantly. This was especially seen in pools with a high share of non-domestic assets (especially loans to the peripheral countries). One example is PBBGR which decreased its public sector cover pool's exposure to the periphery by 5pp over the last quarter. DB provides another example of cover pool quality improvement. Having started pfandbrief activity with commercial assets exclusively, DB has now finalized a u-turn and collateralised its mortgage pfandbriefe with 91% residential assets (for more information, see European Rates Weekly - Riding the Bullish Move).

The secondary market and the safe haven bid

Pfandbriefe are still the benchmark

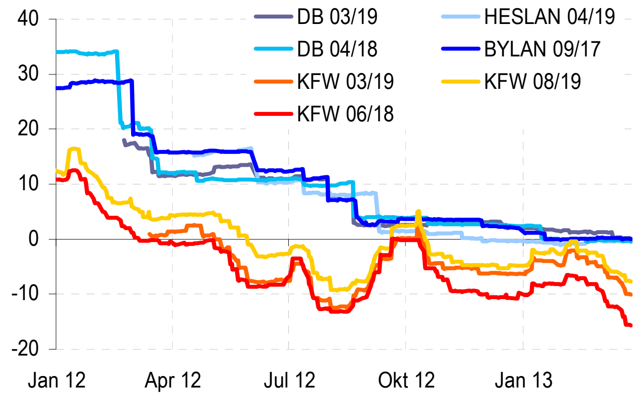
The German pfandbrief curve is still the benchmark within the wider covered bond secondary market, although Swedish paper has been trading on similar levels recently. The above mentioned net shrinkage of the pfandbrief market, its reputation as a safe haven and relatively high secondary market liquidity are the main reasons why we see this continuing. So far, the fact that German issuers increasingly prefer to issue sub-jumbo sized pfandbriefe (i.e. pfandbriefe with issuance volume between €500mn and €1bn) doesn't seem to have affected secondary market liquidity. Generally, the market doesn't differentiate between public sector pfandbriefe and mortgage pfandbriefe.

Figure 11. German pfandbriefe vs Bunds, yield, %



Source: Citi Research

Figure 12. . Stepping up in quality made sense, ASW-Spreads, bp

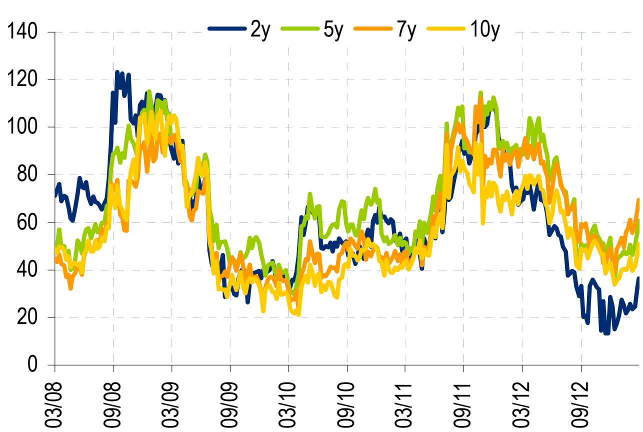


Source: Citi Research

Pfandbriefe-Bund spread driven by the government bond leg

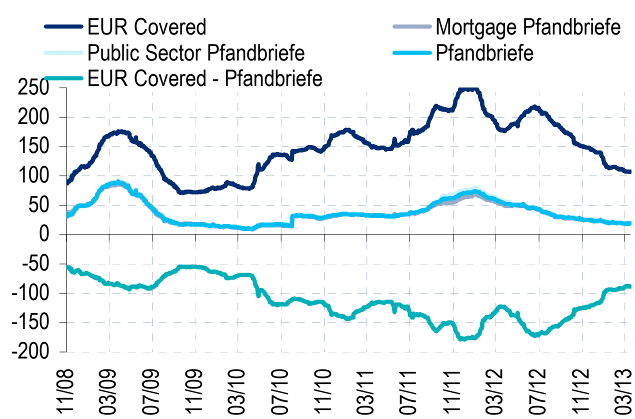
In mid February, some pfandbriefe were trading nearly flat to German agencies and we recommended stepping up in quality and switching to KfW (*European Rates Weekly*). Since then, the spread has been rising again, mainly due to the rally in KfW yields compared to the range trading in pfandbriefe. In comparison to peripheral (semi-core) countries, where covered bonds already trade through (nearly flat) to their respective government bonds, this pattern is not seen in the German market. We don't expect this to change over the medium term.

Figure 13. Historical Pfandbrief-Bund spread, bp



Source: Bloomberg, Citi Research

Figure 14. Pfandbriefe have been outperformed since July 2012, ASW-Spreads, bp



Source: Markit, Citi Research

Conclusion – supports for German agency and covered bonds

We are neutral on Pfandbriefe within the covered bond universe

German agency and covered bonds are likely to remain fundamentally attractive in times of market stress. For pfandbriefe within the wider covered bond market, we are broadly neutral given the low level of yields. However, demand is likely to remain firm for safe haven assets and the lack of supply is also supportive for spreads. For German agencies, benchmark spreads in some cases have broken out from pre-established ranges. This is due to the move lower in Bund yields rather than because of idiosyncratic credit drivers in single names. Buying on dips is likely to remain a key strategy in a generally low yield environment going forward. In the near-term, we would expect such spreads to narrow (as they have started to do) as buying interest emerges.

Euro SSA Strategy

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(1) Strategy views and trading themes

ESM issuance in 2013 is now likely to incorporate measures recently agreed as part of the Cyprus assistance package. Separately, we continue to like the belly of core German agency spread curves given the Bund rally.

ESM issuance in 2013 – assistance to Cyprus

Cyprus and the ESM: The euro area crisis management framework continues to evolve, as clearly illustrated by the response(s) to the situation in Cyprus. What's important for SSA markets specifically is that the ESM looks set to be involved in a loan made to Cyprus (full details of the Cyprus package can be found in Citi's note, *Cyprus - Uninsured Depositors Hit By Major Losses*).

€10bn external assistance: The €10bn external financing to Cyprus is likely to come primarily from the ESM, but may also include a maturity extension of a €2.5bn Russian loan. The IMF is also likely to make a small contribution. This means that the ESM won't necessarily have to provide the full amount of the €10bn loan.

Figure 15. ESM Issuance for Spanish banking assistance package.

Issue Date	ESM Issue	Type	Amt (€bn)
05-Dec-12	ESM FRN Dec15s	FRN	12
05-Dec-12	ESM FRN Jun14s	FRN	6.5
05-Dec-12	ESM Dec14s	FRN	12
05-Dec-12	ESMTB zero Feb13s	Bill	2.5
05-Dec-12	ESMTB zero Oct13s	Bill	6.468
01-Feb-13	ESM FRN Aug15s	FRN	1.865
		Total	**41.33**

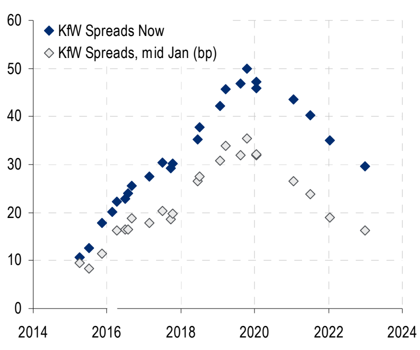
Source: Citi Research, ESM, Bloomberg

ESM issuance: The ESM has already indicated (March Newsletter) that "*we are scheduled to start issuing on the bond markets during the second half of 2013*". To date, the ESM has provided €41bn (cashless operations, not secondary market tradable securities) in assistance to Spain (Figure 15). Securities issued in connection with Spain's banking sector are transferred to the FROB which allocates resources in line with the assistance package. Separately, earlier this year, the ESM has taken over the regular bill issuance programme from the EFSF. Further details can be found in our note, *Euro SSA Strategy - The EFSF and ESM in 2013*.

EFSF issuance: Over Q1, the EFSF issued €17bn. There were six transactions, three of which were new benchmarks and the remaining taps. Going forward, the EFSF has stated that it is targeting a similar volume of €16.5bn for Q2 2013 in order to finance assistance to Ireland, Portugal and Greece (EFSF ESM Newsletter March 2013).

The belly of core German agencies

Figure 16. KfW Spreads to German (bp)



Source: Citi Research, Bloomberg

Spreads open up given the Bund rally: We continue with our theme of "buying on dips" (*2013 Outlook*) and believe this is likely to remain a key strategy in a generally low yield environment going forward. Core SSA markets, such as the German agency sector, remain fundamentally attractive in times of wider market turbulence given their high credit quality and reasonable liquidity. As detailed in our overview article, spreads have widened due to the strong performance of Bunds (rather than idiosyncratic credit quality deterioration). The belly of KfW's curve now offers spreads to Germany around 40bp-50bp (Figure 16) and many levels haven't been in this context in over six months.

Hunt for yield: The agency sector typically has a lower beta compared to the bigger and deeper German government bond market. It is the Bund leg that has driven spreads, but with Schatz having recently traded negative again and 10yr Germany around 1.3%, the hunt for yield is likely to intensify. Consequently, we would expect demand for strong credits to remain firm and for such spread differentials to narrow in the near-term.

(2) Primary market activity

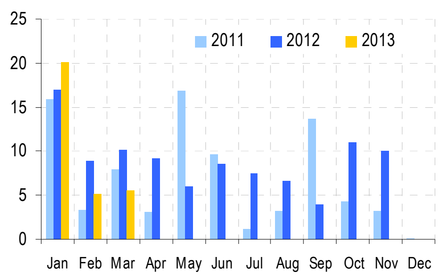
We detail European SSA supply data, including the key transactions of March, and provide completion rates for core issuers as well as upcoming cash flows.

The EFSF has developed into a principal contributor to overall euro supranational supply

Supranationals: Euro denominated supranational supply in March totaled over €5bn (Figure 17). Issuance came largely from EIB and the EFSF in the euro market. In the sterling market, EIB issued over £1bn across four taps.

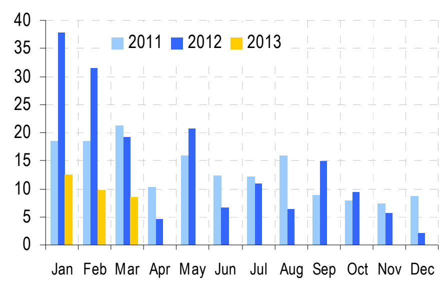
Agencies: Euro denominated agency supply totaled over €7bn in February (Figure 18). Issuance came from a variety of credits and did not include KfW. Supply came from ICO (€1bn ICO Apr18s), FADE (€1.5bn FADE 3.875% Mar18s), OSEO (€0.75bn OSEO Mar15s), CADES (€2.5bn CADES May18s) and UNEDIC (€1.5bn Apr23s).

Figure 17. EUR Supranational Issuance (€bn)



Source: Citi Research, Dealogic DCM Analytics

Figure 18. Non-US Agency EUR Supply (€bn)



Source: Citi Research, Dealogic DCM Analytics

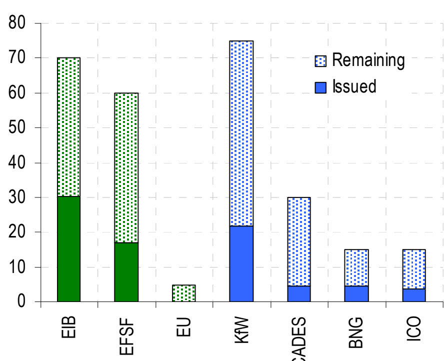
Many issuers are making good progress in terms of their supply pipelines

Completion rates: Aggregating across currencies (Figure 19), many credits have already issued over a quarter of their 2013 supply targets (EIB ~43%, EFSF ~28%, KfW ~29%). Figure 20 and Figure 21 show monthly € supply for EIB and KfW.

Upcoming cash flows: There are the following key cash flows in April:

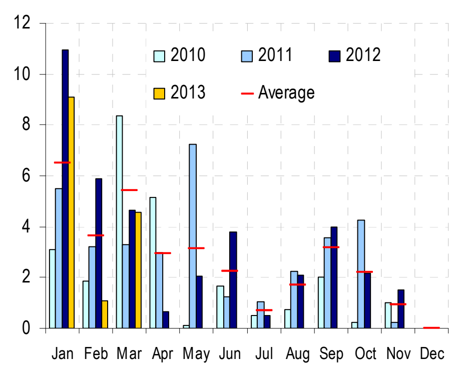
- €5bn redemption from EIB on 15th April (EIB 4.375% Apr13s)
- €3bn from CADES on 25th April (CADES 3.25% Apr13s)

Figure 19. European SSA Issuance Completion Rates, All Currencies, (€bn)



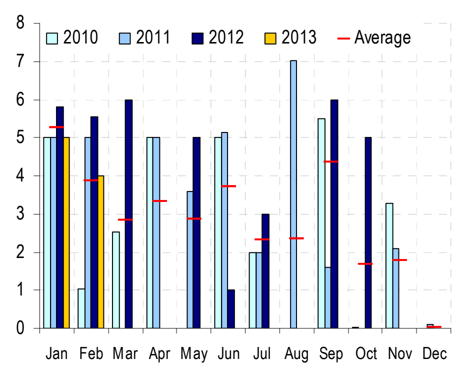
Source: Citi Research, Dealogic DCM Analytics, Issuers

Figure 20. EIB EUR Issuance tends to be higher in Q1 compared with other quarters (€bn)



Source: Citi Research, EIB, Dealogic DCM Analytics

Figure 21. KfW EUR Supply tends to be higher in Q1 compared with other quarters (€bn)



Source: Citi Research, Dealogic DCM Analytics, KfW

(3) Secondary market performance

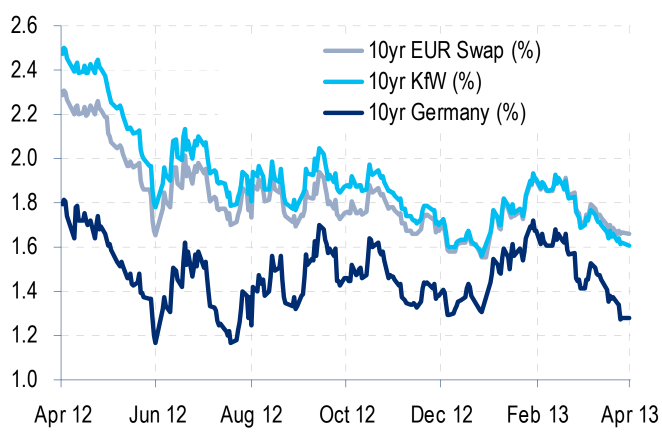
In the secondary market, yields remain relatively low. Spreads to governments have generally widened, spreads to swaps have held firm.

March total returns
€ iBoxx Supranationals 0.27%
€ iBoxx Agencies 0.44%

Positive returns in March: Core SSA issuers continue to trade relatively well and the main iBoxx indices have generated positive returns for March (0.27% in € iBoxx supranationals and 0.44% in € iBoxx agencies).

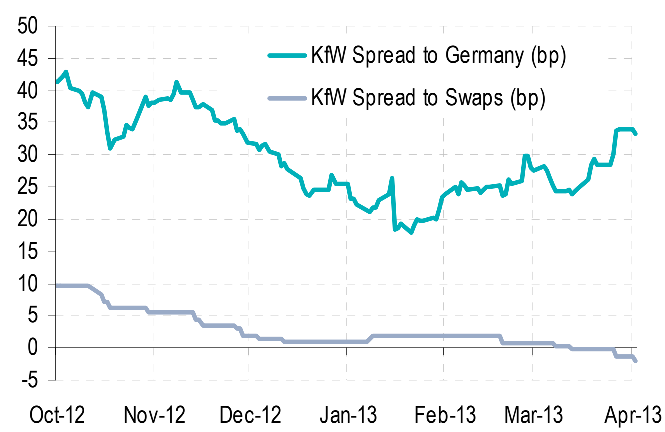
Core cash markets outperforming swaps: On an absolute basis, core SSA yields continue to fall. 10yr KfW at around 1.61% for example is close to all time lows. However, Germany has rallied even more strongly, partly due to ongoing headline risk emanating from the euro area (Figure 22). This has led to a widening in benchmark spreads. However, compared with swaps, core SSA yields have generally moved in tandem or slightly outperformed (Figure 23).

Figure 22. Cash generally outperforming swaps (bp)



Source: Citi Research

Figure 23. ASW spreads remain relatively firm (bp)



Source: Citi Research

Over March, core yields have fallen around 5bp-11bp, spreads to swaps have generally ground in by 1-6bp, but spreads to governments have slightly widened (Figure 24). This is entirely consistent with the "lower beta characteristic" of the core SSA sector: rallies in underlying government bonds tend to be stronger at first than moves in SSA yields. We do not expect significant fundamentally inspired spread widening to governments in the near-term for core SSA issuers.

Figure 24. Select 10yr Core SSA Bonds, Details and Performance in March

					Yield		Spreads to Swaps		Spreads to Germany	
Issuer	Issue Date	Select Bond	Maturity	Amt Outstanding (€bn)	Level (%)	March Change (bp)	Level (bp)	March Change (bp)	Level (bp)	March Change (bp)
EU	25-Apr-12	EU 2.75% Apr22	04-Apr-22	2.70	1.65	-6	12	-1	34	5
KfW	09-Oct-07	KFW 4.625 Jan23	04-Jan-23	3.00	1.61	-8	-2	-3	30	3
CADES	11-Apr-11	CADES 4.125% Apr23	25-Apr-23	5.02	2.18	-11	50	-6	87	-1
iBoxx Index		€ iBoxx Agencies			1.50	-4	52	-3		
iBoxx Index		€ iBoxx Supranationals			1.73	-4	32	-1		

Source: Citi Research, Bloomberg

Covered Bond Strategy

(1) Strategy views

The information provided below should be seen as a weighting recommendation of covered bond segments in order to outperform the iBoxx covered bond index in the medium term.

Few changes since last month

The main change to our recommendation table below is moving Austria to Neutral from Underweight.

Figure 25. Citi Recommendation Overview

Covered Bond Segment	Recommendation	Rationale
Australia	Overweight	Non-Euro diversification, strong banking system
Austria	Neutral	Positive demand-supply pattern, but already rich
Belgium	Underweight	Diversification, but rich versus other covered bond segments
Denmark	Neutral	Weak property sector, strong sovereign
Finland	Overweight	Well functioning housing market, strong sovereign
France	Neutral	Attractive demand-supply pattern, Potential widening as OAT are expected to widen as well
Germany	Neutral	Safe haven bid, very attractive demand-supply pattern
Ireland	Overweight	Bottomed out housing market, Macro level improvements
Italy	Neutral	Political uncertainty, Headline risk
Netherlands	Underweight	Deteriorating housing market, deteriorating macro outlook
Norway	Overweight	Strong sovereign, potential issuance cap for covered bonds
Portugal	Neutral	Headline risk, contagion risk
Spain	Neutral	Weak housing market, headline risk, attractive demand-supply pattern
Sweden	Neutral	Trading rich to historical levels, favourable demand-supply pattern
Switzerland	Neutral	Overheating property market, strong sovereign
UK	Overweight	Non-Euro diversification, demand-supply pattern

Source: Citi Research

Figure 26. Intra-country recommendations

Country	Trade Idea
Netherlands	Prefer SNS Covered Bonds to other Dutch Covered Bonds
France	Prefer CIFEUR: State aid has been approved by European Commission
Italy	Prefer Italian OBG to Italian BTPs
Spain	Prefer Spanish Cedulas to Bonos
Ireland	Prefer Irish ACS to Irish Government bonds
Portugal	Prefer Portuguese covered bonds to Portuguese government bonds

Source: Citi Research

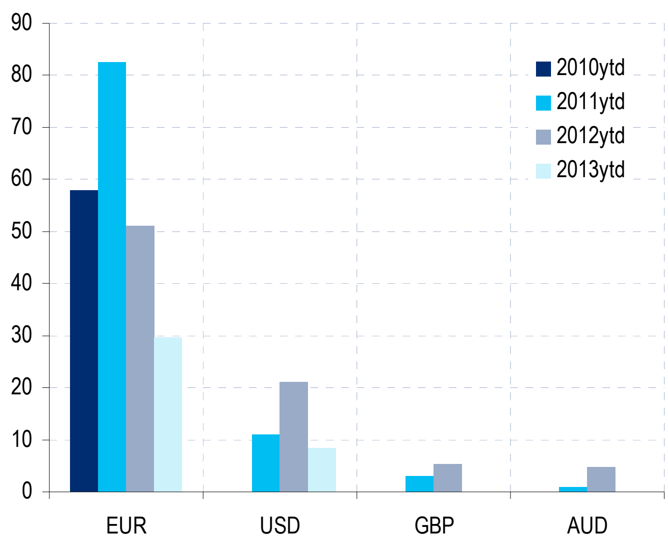
(2) Primary market activity

The first quarter of 2013 saw a paltry €30bn in total covered bond issuance. Are brighter months ahead? We doubt it. Traditionally, the first quarter is the hot spot for supply. Going forward, we continue to hope for further activity. With CAFFIL, Hypolandesbank Vorarlberg, the birth of a covered bond market in Chili and Canadian banks, we have a meagre but existing pipeline in upcoming weeks.

Will new issue premia return?

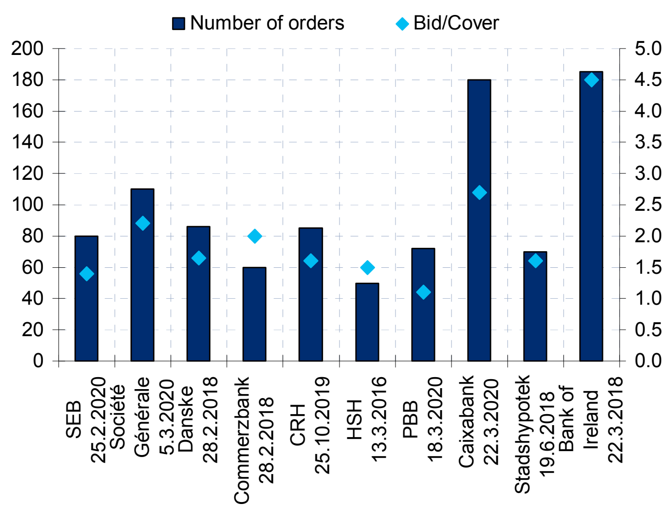
Over Q1 2013, the covered bond market saw a paltry €29.675bn in issuance (including taps). Over March, issuance volumes totaled just €4.5bn. The USD market was fed by $4.25bn. Stadshypotek's new covered bond had to be priced at 14bp over mid-swap in order to attract sufficient investor interest. New issue premia which were more common before the LTRO interventions might return for distinct covered bond issuers. This should mainly be the case for issuers from core countries not being able to rely on a large domestic investor base. In contrast, peripheral tier one covered bond issuers should continue to place new bonds flat and in some cases through their respective secondary curves.

Figure 27. New issuance, main currencies, €bn, YTD



Source: Citi Research

Figure 28. The higher the yield, the higher the interest



Source: CBR, The Cover, Citi Research

Small pipeline expected

Going forward, we believe opportunities are perhaps best found in the secondary rather than primary market, given the relatively small pipeline ahead. In 2Q13, we expect the successor of DexMA to return with its first Obligation Foncière under its new name (*European Rates Weekly - Where next for European curves?*). Moreover, we think that Canadian issuers might have finished their cover pool transformations that were asked by the newly introduced Canadian covered bond law.

Furthermore, as mentioned above, Sparkasse KoelnBonn plans to return to the pfandbrief market since 2008. Moreover, later in April, a new Austrian pfandbrief issuer may place its inaugural mortgage covered bond in benchmark format (see below). With this, the Austrian covered bond drought should come to an end. In the Netherlands (where there has been no covered bond issuance so far in 2013), the prospect of covered bond issuance remains slim. SNS can be expected to be inactive over the coming months. Achmea and NIBC Bank only have one benchmark covered bond outstanding and are adjusting the programmes. Therefore, only the two biggest covered bond issuers remain as potential covered

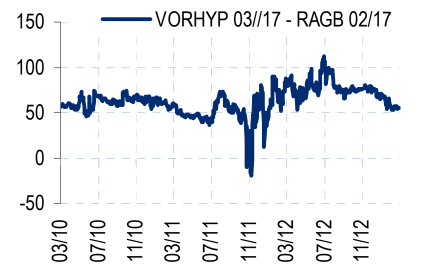
bond issuers. However, against the backdrop of low senior unsecured spreads and less originating activity in the Dutch property market, covered bonds might continue to play a minor role for these issuers.

New benchmark covered bond issuer expected

Issuance of a sub-jumbo transaction expected

Two weeks ago, Hypo Landesbank Vorarlberg announced a roadshow for its inaugural benchmark mortgage covered bond taking place in the first weeks of April. We expect the deal to come to the market shortly afterwards. The issuer which was established by the province of Vorarlberg more than 100 years ago, still belongs to Vorarlberg by a majority of 76% (the other 24% are shared between Landesbank Baden-Württemberg (LBBW) with 16% and Landeskreditbank Baden-Württemberg Förderbank (L-Bank) with 8%). However, liabilities that were issued after April 2007 do not contain a statutory guarantee. Its geographical core market is Vorarlberg with further business in Austria, Switzerland, Germany and Northern Italy.

Figure 29. Senior vs RAGB, ASW-Spread, bp



Source: Citi Research

The issuer had €7.0bn outstanding liabilities as of December 2012 which comprised private placements and Namenspfandbriefe, senior bonds (mostly in CHF) and retail bonds. The senior bond currently trades with a 60bp premium to Austrian government bonds. Within the pfandbrief business, the issuer has so far concentrated on their AAA rated public sector pfandbriefe. For the upcoming mortgage transaction, the issuer has added collateral which now amounts to €1.78bn. Although this makes jumbo-transactions possible, we assume that the issuer prefers a sub-jumbo transaction. An issuance volume of €500mn would result in 256% OC.

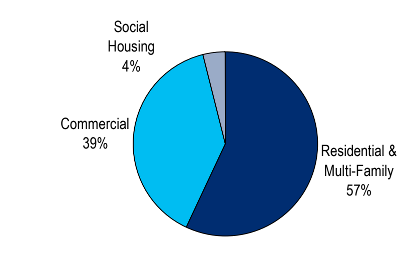
The pool is comprised by 12380 loans resulting in an average loan size of €0.14mn. The weighted average life of the cover pool is 16 years. As with every newly developed covered bond program, there's a high maturity mismatch of assets and liabilities. One further and more important mismatch is the unhedged exposure to other currencies than the Euro. 34% of all loans are denominated in CHF. However, this mismatch could be mitigated by the issuance of CHF denominated covered bonds. We see this is a probable option given that the institution already issued CHF denominated public sector pfandbriefe. Moreover, there will be an unhedged interest rate mismatch between assets and liabilities as 93% of the cover pool's loan payments are variable rate while the issuance will be fixed rate. Both mismatches should however be mitigated by the extremely high overcollateralisation.

Figure 30. Short overview

Number of loans	12380
Number of borrowers	9014
Number of properties	9298
Avg. share of borrower, EURmn	0.2
Avg. share of loan, EURmn	0.14
Share of ten biggest borrowers	6.3%
Share of bullet loans	26.9%
Share of loans in non-domestic currency	36.1%
WAL cover pool (years)	16.0

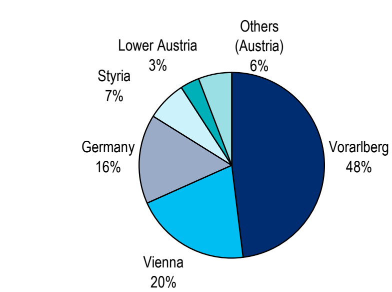
Source: Issuer, Citi Research; WAL = weighted average life

Figure 31. Distribution by asset-type, %



Source: Issuer, Citi Research

Figure 32. Geographical distribution, %



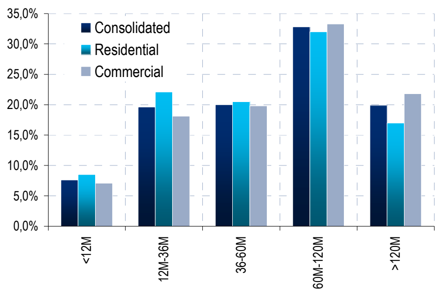
Source: Issuer, Citi Research

VORHYP's geographical focus is reflected in the cover pool composition

39% of the collateral is commercial assets. Generally, the bank's geographical profile is also reflected in its cover pool with 48% of all assets being in Vorarlberg. The bulk of the cover pool's loans payments are based on variable rates. Three

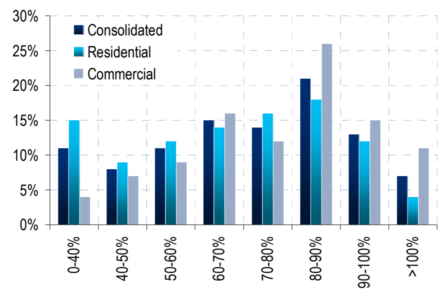
fourths of all assets have a maturity of more than 10 years. The LTV distribution displayed in the graph below reflects LTV numbers as defined by rating agencies (i.e. sum of borrower's claims / sum of current property values). Thus, the average LTV is 70.6%. If only those parts of the loan are considered that are part of the cover pool, the average LTV would be 56.3%, according to the issuer.

Figure 33. Average seasoning by asset type, %



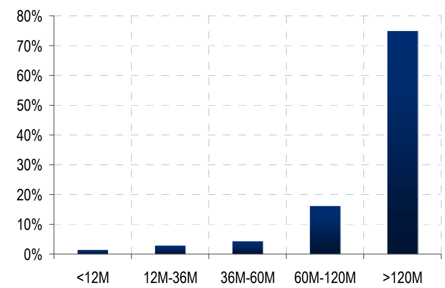
Source: Issuer, Citi Research; M=Months

Figure 34. LTV brackets by asset type, %



Source: Issuer, Citi Research

Figure 35. Assets' maturity distribution, %



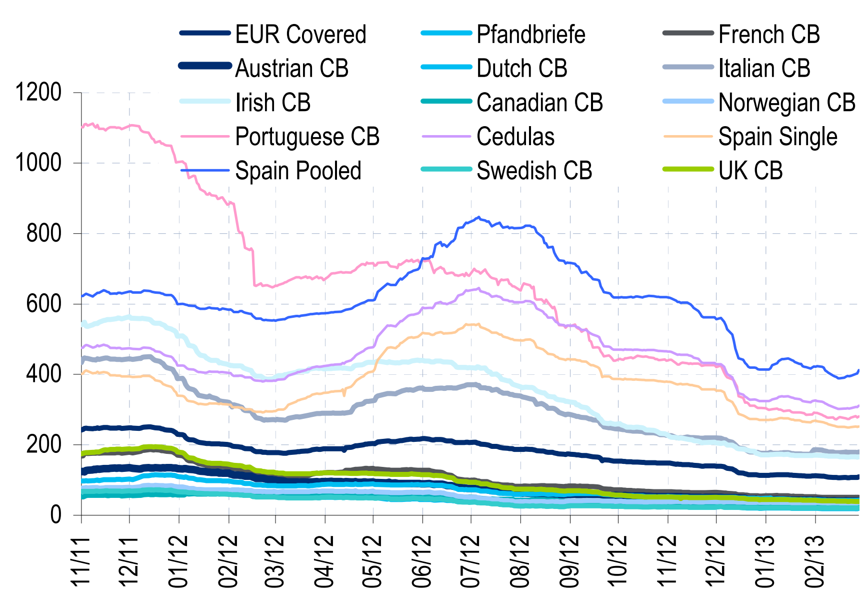
Source: Issuer, Citi Research; M=Months

With Landeshypothekenbank Vorarlberg, the Austrian covered bond segment would see its seventh benchmark covered bond issuer after RLB NOE Wien joined its peers last year. In 2013, there has been no benchmark covered bonds from Austria.

(3) Secondary market performance

Covered bonds continued to tighten versus swaps over March. The lack of supply on the one hand and increasing regulatory driven demand for covered bonds on the other hand continued to drive compression of covered bond segments. This is dominating the simultaneous ongoing credit deterioration in many segments.

Figure 36. The great compression in covered bond markets, ASW-Spread, bp

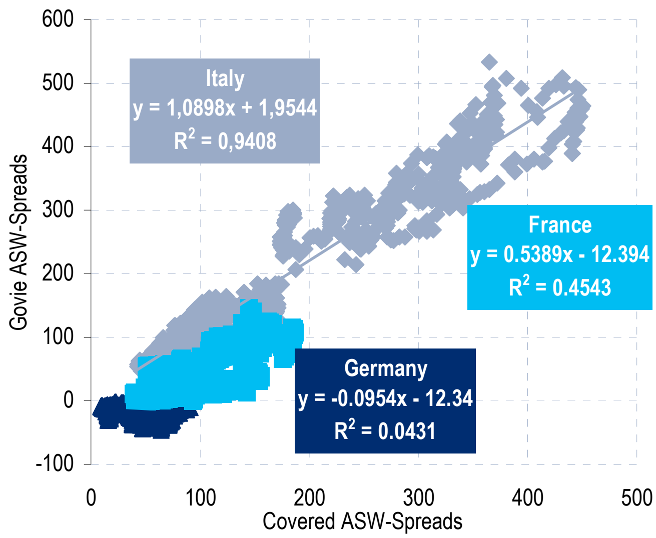


Source: Markit, Citi Research

Still high correlation between covereds and govies in peripherals…

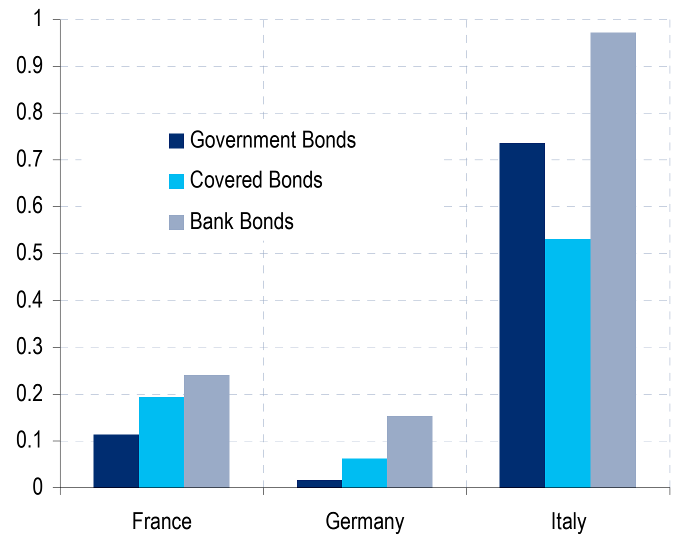
As mentioned in our last SSA / Covered Bond Monthly in February (*Euro SSA and Covered Bond Strategy*), we think that the long walk sideways will probably continue over the medium term. However, continuing support for core covered bond yields - mainly driven by the lack of supply, high redemptions and the safe haven bid for these segments – can be expected over the next months. Peripheral covered bonds, however, are driven by several factors with diametrical impact on yields. The net negative issuance in the whole covered bond market in general and in the Spanish covered bond segment in particular should result in lower yields while the high correlation to their respective government bond market (see below) should spill over and lead to a more volatile development in the mid-term.

Figure 37. The higher the sovereign risk, the higher the correlation; ASW-Spreads, bp, 01/09-03/13



Source: Citi Research, Markit

Figure 38. 1 year variance, ASW-spreads, 5y tenor

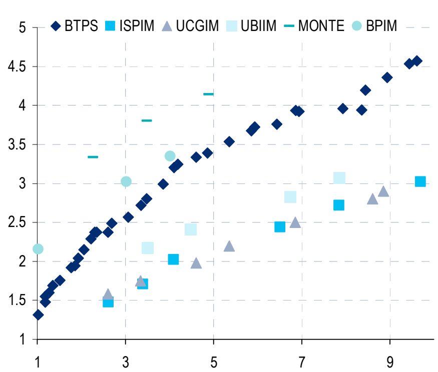


Source: Citi Research, Bloomberg

…while volatility in covered bonds is lower

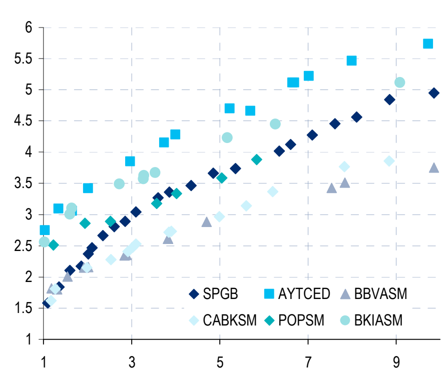
Having said that, we opine that in the peripheral markets (Spain, Italy and Portugal) Tier 1 (and partly Tier 2) covered bonds should continue to trade through government bonds on a less volatile basis. One main driver should be the diametrical demand-supply pattern within these markets.

Figure 39. Italy: Government bonds and covered bonds, yield, %



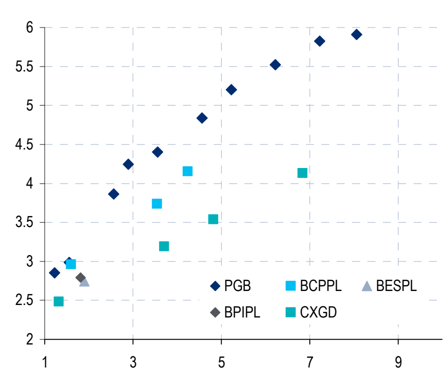
Source: Citi Research

Figure 40. Spain: Government bonds and covered bonds, yield, %



Source: Citi Research

Figure 41. Portugal: Government bonds and covered bonds, yield, %



Source: Citi Research

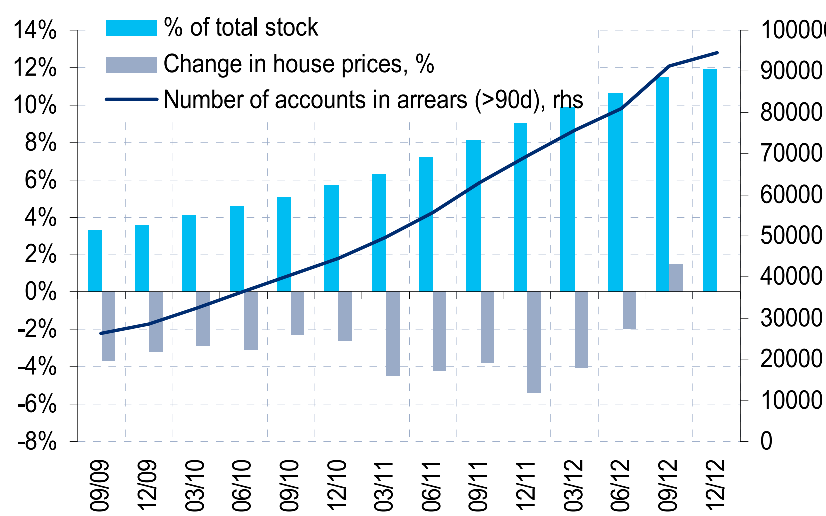
(4) Legal, regulatory and rating news

Ireland: "Support those who can't pay – not those who won't pay"

Modifications in Irish law

The Irish department of finance, in conjunction with its national central bank plans to introduce new legislations to alleviate the constant rise of loans in arrears. The main target now is that banks propose sustainable mortgage solutions for 50% of their distressed borrowers (more than 90 days in arrears) until the end of 2013. This should be achieved by several ways. One requirement for banks is to disclose information about execution success while the oversight has the option to implement regulatory action (including additional capital requirements and more rigorous provisioning).

Figure 42. Arrears and house prices on different paths



Source: Central Bank of Ireland, Citi Research

Changes to the CCMA expected

Moreover, the regulators plan to make changes to the Code of Conduct on Mortgage Arrears (CCMA) that exacerbated repossession processes where necessary. According to Moody's "the unintended consequences of the Land and Conveyancing Law Reform Act 2009, […], have made it virtually impossible for lenders to get a court order to repossess a home if the mortgage loan was originated before 1 December 2009. This has led to a freeze on repossessions in Ireland. "[1] While the ministry emphasizes the importance of support and fair treatment for borrowers who have difficulties repaying their debt, they also clarify not to accept non-cooperating borrowers. Moreover, the lenders' moratorium of 12 months on cooperating borrowers should be declared less frequent.

No immediate impact on cover pools but improvement of the credit

With these measures, the regulators are trying to achieve a higher level of repossessions and at the same time increase borrowers' willingness to payoff their loans where still possible. We think that the implementation of the new law wouldn't have an immediate impact on Irish ACS cover pools. Both mortgage ACS issuers treat loans in arrears as ineligible assets and remove these loans from their respective cover pools anyway. However, we opine that the recalibration of CCMA to ease banks' difficulties in dealing with loans in arrears can be seen as equally positive as the general balance sheet improvements that should be expected.

[1] Moody's: "Ireland Seeks to Strengthen Lenders' Ability to Deal with Mortgage Arrears, a Credit Positive for Covered Bonds and RMBS", 21.03.2013

CRD IV and Cyprus – are covered bonds the last ones standing?

CRD IV increasingly takes shape

The European Commission is said to have agreed upon the latest draft of the Capital Requirement Directive (CRD IV) two weeks ago. An official publication is expected to be published towards the end of 2Q13 which means that a legal implementation would not start before January 2014 at best. There are still some questions for ongoing discussion. The European Banking Authority is responsible for defining which assets are "high quality liquid assets" (HQLA) which would allow banks to use these in an unlimited amount within their Liquidity Coverage Ratio (LCR) without haircuts. Moreover, the amount of haircuts for other assets also seems to be part of further discussions.

Covered bonds are not "bail-inable",…

The fact that CRD IV explicitly says that secured liabilities are exempt from any bail-in discussion doesn't seem to be the object of any further discussion. On that the draft is very clear, giving however national regulators the possibility to include secured liabilities to bail-inable debt. Currently, we think that national regulators wouldn't see this as a potential way to follow. This should support covered bonds in general and shift relative pricing and importance between covered bonds and senior bank bonds to the former. In the case of the nationalization of SNS Bank, the regulators' expression that the bail-in of senior bondholders was an exceptional case shows the political willingness to make senior bondholders part of bank debt restructurings. Even more, the latest Cypriot deal made it clear that the politicians want an active involvement of banks' equity and bondholders in cases of restructuring before a government bailout would be implemented which could result in potential losses for government bondholders.

…are they?

Another implication of the Cypriot deal is governments choosing the route of least resistance (see also *Global Economics View - The euro area recovery starts with Cyprus*) and highest result to recapitalise banks. In the case of Cyprus, the least resistance came from uninsured depositors. Moreover, a high result of recapitalization couldn't have been achieved by saving depositors and bailing in bondholders only. This resulted in the "special" move in Cyprus. To us, the "exceptional" situations in the European debt crisis are on the rise. We see this as a concern for all market segments as political predictability decreases. However, we think that the circumstance that the covered bond market is the last funding channel for banks to access the market in case of market distress – leaving ECB support aside – should continue to protect the segment of politically driven "exceptional" measures (see also *Behold the new form of bail-in - Expect the Cypriot model now to be applied elsewhere.).*

Covered bonds outperform senior paper

This is why we think that in the short and long term, senior bank bonds are likely to continue to underperform their respective covered bonds although the average spread level should vary by country and by issuer.

Asian Covered Bonds on the rise?

New diversification possibilities ahead

So far, the Asia-Pacific playing field for covered bonds has been clearly dominated by the Pacific countries, i.e. Australia and New Zealand. While the issuers from "Down Under" can rely on a juridical framework for covered bonds, New Zealand should be on the brink of introducing its law. Meanwhile, South Korean and Singaporean regulators are putting their foot down and should introduce their legal frameworks for covered bonds.

South Korea: First the market, then the law

South Korean covered bonds have already been issued

Covered bonds from South Korea are not completely new. The market was kick-started in 2010 when a state-owned mortgage lender issued its inaugural bond, secured by Korean residential mortgages. The issuer came to the market with two follow-up deals exclusively in USD. Apart from that, Korea's Kookmin Bank has been another "covered bond" issuer. They secured their paper with a mix of credit card loans and mortgage loans. The former has been substituted with cash in 2010 in order to phase out its credit card business. Overall, the USD Korean covered bond market has an outstanding volume of EUR2.5bn.

Broad overview has been given

So far, we couldn't have a look at the Korean covered bond law in its original wording. Nevertheless, the regulator has published an outline with the most important factors described. These are outlined in the table below.

Figure 43. The South Korean Covered Bond Law in Brief

Definition of covered bonds	Bonds issued under the act secured by a cover pool of assets provided by the issuer granting a priority right of payments from cover assets.
Eligible issuers	a) institutional requirement: banks, Korea Housing Finance Corporation, Korea Finance Corporation, other equivalent institutions designated by Presidential Decree; registration of covered bond issuance plan and details of the cover pool with the FSC b) eligibility requirement: equity capital > KRW100bn and BIS ratio > 10% ; capability of ensuring proper funding, operation and risk management
Cover Pool assets	a) Cover assets: mortgage loans, debts issued by governments and public institutions, government bonds b) Liquid assets: cash, certificates of deposit issued by other banks with a maturity of less than 100 days (not more than 10%) c) Other assets: recovery from cover assets, property earned through management, operation, and sale of assets,
Overcollateralization Ratio	5%
Issuance cap	8% of its total assets at the end of the fiscal year
Cover Pool Management	Separately from other assets on separate balance sheet by issuer; permanently maintain a collateral ratio and cover pool eligibility; external auditor for supervision
Preferential rights	Dual recourse: preferential claim of covered bondholders and certain other parties to cover pool in case of issuer's default and pari passu claim to the issuer's other assets
Public disclosure and supervision	a) Public disclosure: quarterly published on website; b) Supervision: Establish risk management for issuance and repayment; FSC has the right to take corrective measures and demand further material

Source: FSC, Kim&Chang, Citi Research

Law shows similarities to European covered bond law

We think that the general framework has many similarities to the traditional covered bond markets. Fitch also commented positively on the Korean covered bond law which constitutes many important features that should guarantee an uplifted covered bond rating over the issuer rating (e.g. ring-fencing of cover assets). According to the rating agency, the law also details administrator's duties as for example the liquidation of assets in case of issuer insolvency. We understand that

the new law will not be enforced before August 2013. More details on the Korean housing market please see Korea Macro Flash - Gov't Issues Comprehensive Measures on the Housing Market.

Only few issuers can be expected

Currently, apart from the already active issuer, we see Shinhan Bank as a further potential covered bond issuer. Other banks that could potentially follow are Hana Bank and Kookmin Bank. However, we understand that this cannot happen immediately as these issuers signed negative pledge clauses not allowing pledging collateral to any cover pool. First issuance would be possible after 2017, then.

Singapore: Issuance capped

2% cap hampers new issuance in theory

The Singaporean regulators and banks chose a different way than South Korea. The law is going to be implemented first with banks then already relying on a legally set out playing field. However, the fact that an issuance cap of 2% of total bank's assets is going to be introduced shows that the market potential is rather small. Nevertheless, both for investors and issuers the covered bond market should display an interesting funding/investing and maturity profile lengthening alternative. Although a 2% cap is low – lower than all established issuance caps so far – Fitch assumes that Singapore's deposit-funded banks would not exhaust this limit.

Figure 44. The Singaporean Consultation Paper for Covered Bonds in Brief

Definition of covered bonds	Bonds issued under the act secured by a cover pool of assets; ring-fenced assets providing dual recourse to bank & cover pool; assets must meet certain underwriting and quality criteria, being in excess of the notional value of covered bonds
Eligible issuers	All banks incorporated in Singapore, i.e. no foreign incorporated entities
Cover Pool assets	Residential mortgage loans with LTV ratios < 80% (> 80% LTVs get a haircut); Derivatives
Overcollateralization Ratio	3%
Issuance cap	2% of the bank's total assets
Cover Pool Management	a) Cover pool may stay on the bank's balance sheet or pledged to a bank's SPV (wholly owned by the bank and incorporated in Singapore) b) External auditor for supervision (informing MAS annually, hold an asset register, verify asset eligibility, assess risk management processes, immediate reporting obligation if conditions were breached) c) Regular stress test for default, pre-payment, currency, interest rate, counterparty and liquidity (not more specified)
Preferential rights	Dual recourse: preferential claim of covered bondholders and certain other parties to cover pool in case of issuer's default; unclarity concerning harmonisation with Singaporean insolvency law
Public disclosure and supervision	Public disclosure: No details given Supervision: MAS needs to be notified before issuance (one month); further requirements can be imposed by MAS

Source: MAS, S&P, Citi Research

So far the draft is vague and gives room for interpretation

In March last year, the Monetary Authority of Singapore (MAS) published its first consultation paper for covered bonds. Since then, new information concerning implementation hasn't come to the market. Given the outline which we could see so far, it shouldn't surprise if the framework stays vaguer than other European covered bond frameworks. This should then place special emphasis on contractual specificities established within the programs' documentations. However, a draft law could draw a substantially different picture to last year's consultation paper. So far, it seems that MAS gives itself strong supervisory powers, being able to enact on an individual basis. We note that having the assurance of a strong regulator can be seen as positive. However, this might also lead to a lack of legal consistency.

Low issuance should be expected

In Singapore, we think that United Overseas Bank and Oversea-Chinese Banking Corporation might be one of the first issuers of covered bonds. However, the 2% issuance cap makes it clear that MAS wants to grant their domestic banks another funding possibility. The danger of asset encumbrance seems to be too high for the regulators. Therefore, the potentially AAA rated covered bonds from Singapore will stay a rarity when they start being introduced.

New ECB collateral rule affects covereds theoretically

New requirements with respect to government guaranteed bank bonds

The European Central Bank (ECB) announced further changes in the use of collateral for Eurosystem monetary policy operations. Uncovered government-guaranteed bank bonds issued by the counterparty itself or an entity closely linked to that counterparty lose ECB eligibility as of March 1st 2015. This also affects own issued covered bonds that might be backed by this asset class. We are not aware of any cover pools that should be affected by this new announcement. However, CIF Euromortgage's parent company 3CIF might be one of the issuers that potentially might not be able to rely on their own bonds for repo operations as of 2015. However, against a background of French state support, the issuer should not have problems placing its bonds into the public markets.

Multi-Cédulas: rating actions in all directions

51 rating actions by S&P

Last week, S&P downgraded 29 multi-transactions, maintained the ratings of 18 transactions and upgraded four multi-cédulas. S&P noted that the Spanish covered bond market continues to suffer credit deterioration in underlying fundamentals. In general, a rating action on a sovereign or issuer precedes similar actions on covered bonds. While the downgrades were mainly due to increased credit risk following the latest negative rating transactions on Spanish financial institutions on the one hand, the affirmations and upgrades on the other hand were mainly caused by the relatively short remaining maturities and a functioning liquidity line for the time being.

Figure 45. Multi-Cédula rating actions by S&P

Series	ISIN	Rating from	Rating to	Series	ISIN	Rating from	Rating to
AYTCED 3.5 14.03.2016	ES0312298013	A- /Watch Neg	BBB	AYTCED 4.25 18.11.2019	ES0312362017	AA- /Watch Neg	A-
AYTCED 3.75 14.12.2022	ES0312298021	BBB /Watch Neg	BBB-	AYTCED 0.255 30.06.2015	ES0312342001	BBB- /Watch Neg	BBB
AYTCED 0.326 22.02.2018	ES0312298039	A /Watch Neg	A-	AYTCED 3.75 30.06.2025	ES0312342019	BBB /Watch Neg	BBB
AYTCED 4 24.03.2021	ES0312298054	BBB /Watch Neg	BBB	CEDGBP 4.25 26.04.2017	ES0318822006	AA-	AA-
AYTCED 0.288 26.05.2017	ES0312298062	BBB /Watch Neg	BBB	IMCEDI 3.85 23.12.2013	ES0347463004	AA-	AA-
AYTCED 4.25 14.06.2018	ES0312298070	BBB- /Watch Neg	BB+	CEDTDA 3.125 23.09.2013	ES0316989005	AA-	AA-
AYTCED 4.25 25.10.2023	ES0312298096	BBB /Watch Neg	BBB-	CEDTDA 3.5 09.04.2017	ES0316990003	AA-	AA-
AYTCED 3.75 25.10.2013	ES0312298088	A	A+	CEDTDA 4.5 26.11.2013	ES0317019000	A-	A
AYTCED 4 20.12.2016	ES0312298104	A /Watch Neg	A-	CEDTDA 4.25 27.12.2014	ES0316992009	AA-	AA-
AYTCED 4 21.03.2017	ES0312298112	BBB- /Watch Neg	BBB-	CEDTDA 4.375 03.03.2016	ES0317043000	AA- /Watch Neg	A-
AYTCED 4.75 25.05.2027	ES0312298120	BBB- /Watch Neg	BB+	CEDTDA 4.125 29.11.2019	ES0317045005	A /Watch Neg	BBB
AYTCED 0.295 24.05.2019	ES0312298138	BBB- /Watch Neg	BBB-	CEDTDA 3.875 23.05.2025	ES0317046003	A- /Watch Neg	BBB-
AYTCED 0.359 23.10.2017	ES0312298153	A- /Watch Neg	BBB	CEDTDA 3.5 20.06.2017	ES0317047001	BBB- /Watch Neg	BB+
AYTCED 1.109 23.10.2013	ES0312298187	AA-	AA-	PITCH 5.125 20.07.2022	ES0334699008	AA- /Watch Neg	A-
AYTCED 1.42 24.11.2015	ES0312298195	AA-	AA-	CEDGBP 4.25 12.02.2014	ES0347858005	AA-	AA-
AYTCED 4.75 15.06.2016	ES0312298229	AA-	AA-	IMCEDI 3.85 23.12.2013	ES0347463004	AA-	AA-
AYTCED 4.25 29.07.2014	ES0312298237	AA- /Watch Neg	A+	IMCEDI 4 19.11.2014	ES0347852008	A+ /Watch Neg	A-
AYTCED 4.5 02.12.2019	ES0312298245	AA- /Watch Neg	A	IMCEDI 3.75 11.03.2015	ES0347848006	A- /Watch Neg	BBB
AYTCED 3.75 25.05.2015	ES0312298252	AA-	AA-	IMCEDI 3.5 15.06.2020	ES0347849004	A- /Watch Neg	BB+
AYTCED 3.75 31.03.2015	ES0312358007	BBB+ /Watch Neg	BBB	IMCEDI 3.5 02.12.2015	ES0362859003	A+ /Watch Neg	BBB-
AYTCED 4 31.03.2020	ES0312358015	BBB+ /Watch Neg	BBB	CEDTDA 0.251 08.04.2016	ES0371622004	A /Watch Neg	BBB
AYTCED 4.5 04.12.2013	ES0370148001	A+ /Watch Neg	AA-	CEDTDA 4.125 10.04.2021	ES0371622012	BBB /Watch Neg	BBB-
AYTCED 4.75 04.12.2018	ES0370148019	A+ /Watch Neg	A+	CEDTDA 4.25 10.04.2031	ES0371622020	BBB- /Watch Neg	BBB-
AYTCED 4 07.04.2014	ES0312360003	AA- /Watch Neg	A+	CEDTDA 4 23.10.2018	ES0371622038	A+ /Watch Neg	A-
AYTCED 4 18.11.2014	ES0312362009	AA- /Watch Neg	A+	CEDTDA 4.25 28.03.2027	ES0371622046	BBB+ /Watch Neg	BBB-

Source: S&P, Citi Research

Redemptions April 2013

Figure 46. Redemption payments: April 2013

Issuer Name	Ticker	Coupon	Maturity	Announce	Country
CaixaBank	CABKSM	2.5	29.04.2013	20.04.2010	ES
Bankia SA	BKIASM	3	15.04.2013	30.03.2010	ES
Banco Santander Totta SA	SANTAN	2.625	15.04.2013	29.03.2010	PT
Bankinter SA	BKTSM	2.625	09.04.2013	25.03.2010	ES
Skandinaviska Enskilda Banken AB	SEB	4.5	25.04.2013	22.04.2008	SE
AIB Mortgage Bank	AIB	3.75	30.04.2013	29.03.2006	IE
CaixaBank	CABKSM	2.5	29.04.2013	20.04.2010	ES
Banco de Sabadell SA	SABSM	4.5	29.04.2013	15.04.2003	ES
Muenchener Hypothekenbank eG	MUNHYP	4.25	08.04.2013	01.04.2003	DE

Source: Citi Research

Covered Bond Performance

Figure 47. iBoxx Covered Bond Indices: Total Return, %

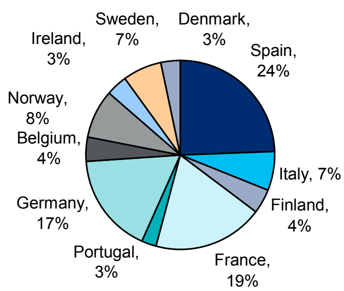
Segment	Absolute	Δ 1m	Δ ytd	Δ 1y
EUR Covered	193.52	0.6%	1.8%	8.3%
Pfandbriefe	185.99	0.2%	0.3%	4.3%
Mortgage Pfandbriefe	191.84	0.3%	0.3%	4.5%
Public Sector Pfandbriefe	184.12	0.2%	0.3%	4.2%
French Covered Bonds	209.83	0.6%	1.2%	8.7%
Obligations Foncières	142.56	0.6%	1.3%	9.1%
Obligations à l'Habitat	129.09	0.1%	0.3%	3.2%
Spanish Covered Bonds	188.77	1.1%	4.8%	11.2%
Spanish Single Covered Bonds	125.12	1.0%	3.7%	8.5%
Spanish Multi Covered Bonds	129.80	1.3%	7.5%	17.7%
Austrian Covered Bonds	135.74	0.5%	0.8%	6.4%
Dutch Covered Bonds	144.26	0.5%	0.8%	7.6%
Italian Covered Bonds	125.44	0.8%	2.0%	10.1%
Irish Covered Bonds	141.18	0.3%	1.4%	12.8%
Canadadian Covered Bonds	125.43	0.6%	0.7%	7.2%
Norwegian Covered Bonds	135.33	0.5%	0.5%	6.8%
Portuguese Covered Bonds	140.41	0.7%	4.1%	20.4%
Swedish Covered Bonds	131.84	0.2%	0.2%	4.0%
UK Covered Bonds	143.48	0.5%	0.8%	8.5%

Source: Citi Research

Covered Bond Glossary

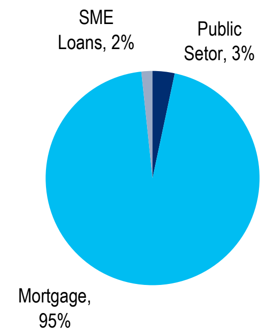
Primary Market 2013

Figure 48. EUR Benchmark covered bonds: Geographical distribution, %



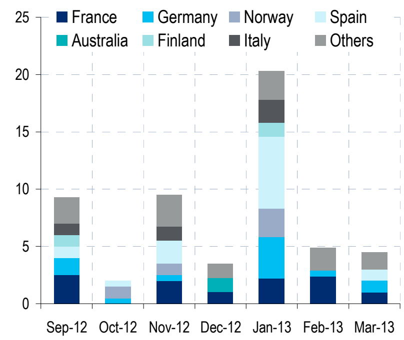
Source: Citi Research

Figure 49. EUR Benchmark covered bonds: Distribution by Collateral, %



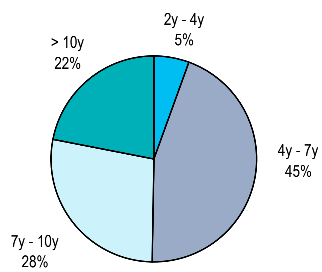
Source: Citi Research

Figure 50. EUR Benchmark covered bonds: Issuance by month



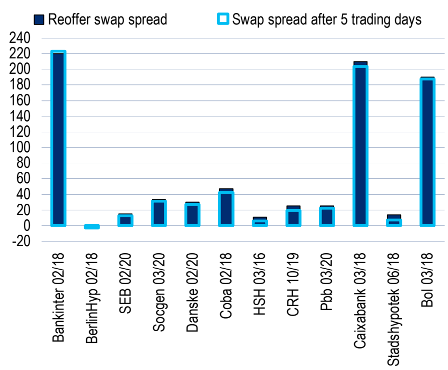
Source: Citi Research

Figure 51. EUR Benchmark covered bonds: Issuance by maturity, %



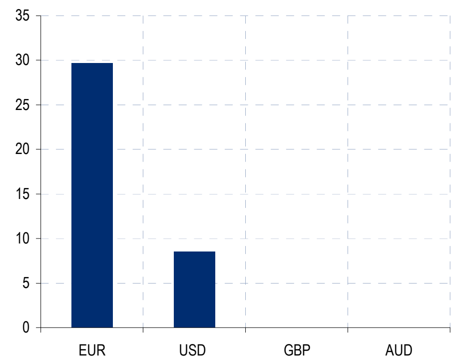
Source: Citi Research

Figure 52. Selection of deals' performance after five trading days



Source: Citi Research

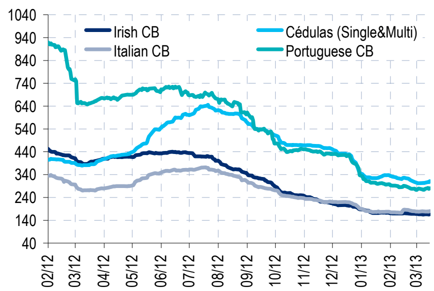
Figure 53. New benchmark covered bond issuance by currency, bn



Source: Citi Research

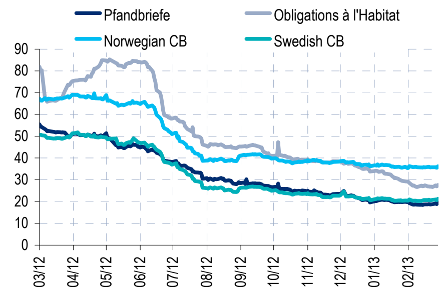
Secondary Market 2013

Figure 54. Secondary Market Performance, ASW-Spreads, bp



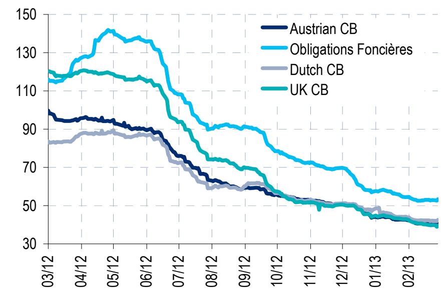
Source: Citi Research, Markit

Figure 55. Secondary Market Performance, ASW-Spreads, bp



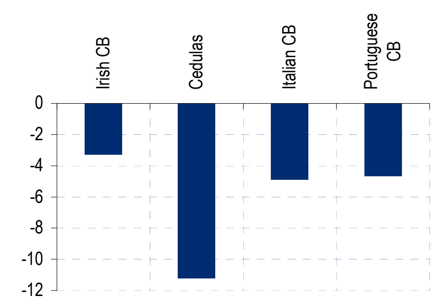
Source: Citi Research, Markit

Figure 56. Secondary Market Performance, ASW-Spreads, bp



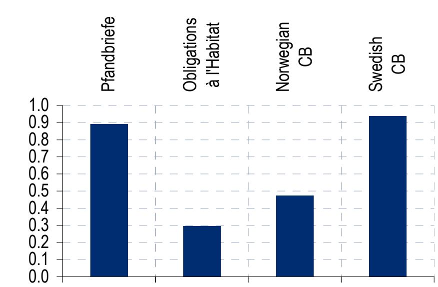
Source: Citi Research, Markit

Figure 57. ASW-Spread change during last month, bp



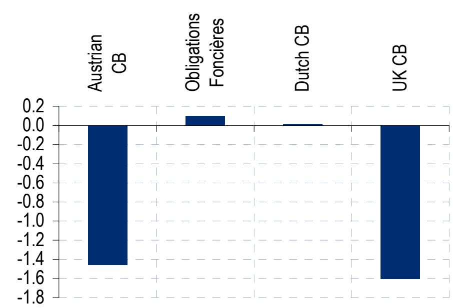
Source: Citi Research, Markit

Figure 58. ASW-Spread change during last month, bp



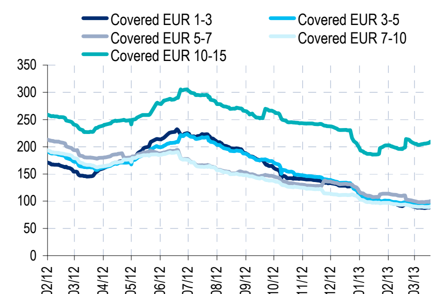
Source: Citi Research, Markit

Figure 59. ASW-Spread change during last month, bp



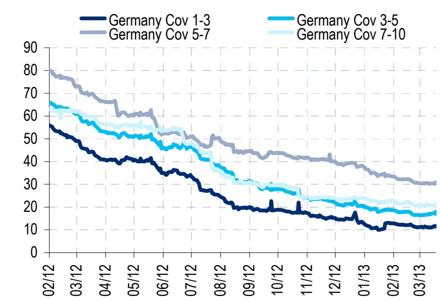
Source: Citi Research, Markit

Figure 60. Covered Bond Tenors, ASW-Spreads, bp



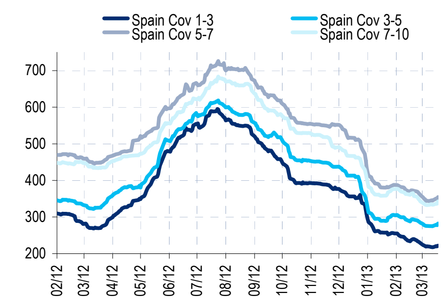
Source: Citi Research, Markit

Figure 61. Covered Bond Tenors, ASW-Spreads, bp



Source: Citi Research, Markit

Figure 62. Covered Bond Tenors, ASW-Spreads, bp



Source: Citi Research, Markit

Appendix A-1

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