

Uncovering covered bonds

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bond issuances in 2012 were
from outside Europe*

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Executive summary

More than half of covered bond issuances in 2012 were from outside Europe

After over two centuries of life and use in the European debt markets, the concept of a covered bond market is being widely evaluated by other markets. This is driven by a number of factors including the limited availability of long-term unsecured funding, the increased long-term liquidity requirements to come from Basel III rules, increased swap costs for prepayable securities and changes in investors' appetite for traditional asset-backed securitization products, and the returns required to compensate for holding them.

More than half of global new issuance in 2012 is already accounted for by issuers outside Europe. The growth can be attributed to a shortage of USD funding in a number of countries in Asia Pacific supported by new legislative developments which have permitted banks to launch covered bond programs, especially in Australia.

Support towards establishing a regulated covered bond market in the US has also been increasing lately. A legislative bill has been put forward in the House and appears to have bipartisan support. Although some key issues remain outstanding, mainly around the role of the FDIC in the event of bankruptcy for issuer banks, many expect the bill to progress and be adopted by 2013.

Dollar-denominated covered bonds have made their way to the US market, but the bonds have only been sold under private placements to institutional investors. New legislation would allow for the bonds to be sold to retail investors which will expand the customer base and provide the momentum for developing the US covered bond market. It is notable that in May 2012, the Securities and Exchange Commission (SEC) allowed for a \$12bn covered bond program by Royal Bank of Canada (RBC) to be sold as 'registered securities', further paving the way towards opening up the US covered bond market.

The ability to raise more stable longer-term funding and access to a broader pool of investors are the main advantages to banks issuing covered bonds. During the credit crisis, the supply of liquidity to European banks, the traditional issuers of covered bonds, via these securities was not significantly interrupted. With global liquidity remaining tight, the pricing of covered bonds has ticked upwards in recent months. Funding via these instruments remains competitively priced in comparison to unsecured funding and asset backed securities (ABS) for highly rated same name issuers.



A number of features make covered bonds attractive to investors, thereby driving demand for those products.

- Covered bonds provide investors with a legal claim on both the issuer and the cover pool of assets in the event of bankruptcy.
- The transparency and simplicity of covered bond programs is greater than most securitisation structures, which could help attract liquidity back into the private US mortgage markets.
- The bullet repayment feature of covered bonds provides greater certainty for liquidity management for issuers, appealing to rates investors and can help manage currency swap costs.
- Last but not least, covered bonds benefit from preferential treatment (as compared to unsecured corporate bonds) under existing and proposed bank and insurance capital rules in many jurisdictions.

Demand for covered bonds is expected to grow and the development of covered bonds markets is expected to continue in line with changing prudential norms, fresh supply from issuers in new geographical markets, and product innovation such as floating rate issuances.

Now is the right time for potential new issuers outside of Europe to evaluate the use of covered bonds as part of their funding strategy. Banks should be cautious however, not to place too much reliance on covered bonds. The use of covered bonds adds incremental constraints that banks need to manage together with other existing constraints. Covered bonds help with the liquidity ratios but do not reduce risk-weighted assets or the leverage ratios. With a growing proportion of the balance sheet encumbered, at some point, what may be a solution for liquidity, can become a problem with leverage and/or capital. The potential benefits for covered bond programs needs to be carefully evaluated, in context of the respective regulatory framework governing the program, and the subordination of non-secured bondholders in the event of insolvency of the issuer.

The following pages provide more details on:

- Key features of covered bonds for issuers and investors;
- An overview of covered bond regimes in key jurisdictions;
- An analysis of recent covered bond issuance trends; and
- The key steps towards establishing a covered bonds program.

Beyond those strategic considerations, developing a covered bond program entails tactical challenges that should not be underestimated. For instance, the regulatory approval, rating and pricing of a covered bond issuance will be in part driven by the effectiveness of the operational and financial reporting processes around the cover pool of assets. The UK's Financial Services Authority (FSA) has recently issued guidelines for issuers on the production and content of management information for regulated programs to promote transparency and enhance investor understanding. The FSA is developing guidance on asset pool monitoring designed to improve comparability between programs and the quality of their assets. The implementation of this guidance may be challenging and it remains to be seen whether other regulators will implement similar practices.

What makes covered bonds an attractive vehicle for issuers and investors?

General characteristics of covered bonds

Covered bonds generally include the following key features:

- Dual-recourse bonds with a claim on the issuer and a cover pool of high-quality collateral which the issuer is required to maintain dynamically throughout the term of the issue. The pool must be replenished with new assets to maintain a specified credit quality;
- Typically pay fixed rates and have “bullet” maturities in the medium to long-term (3-15 years);
- Provide investors with a priority claim on the cover pool in the event of failure of the issuer; and
- In comparison with other debt securities issued by banks, covered bonds can be considered a form of senior secured debt.

Minimum standards for covered bonds

1. The bond is issued by – or bondholders otherwise have full recourse to – a credit institution which is subject to public supervision and regulation (e.g. a banking licence requiring compliance with standards on credit, liquidity and other financial and operational risks).
2. Bondholders have a claim against a cover pool of financial assets in priority to the unsecured creditors of the credit institution.

3. The credit institution has an ongoing obligation to maintain assets of a specified total value, each of a specified quality in the cover pool to satisfy the claims of covered bondholders at all times. It is typically required that the book value (after credit provisions) of the assets exceeds the notional value of the bonds (overcollateralization).
4. The obligations of the credit institution in respect of the cover pool are supervised by public or other independent bodies.

This typically requires:

- a cover pool monitor
- periodic assessment of the cover pool by the cover pool monitor
- ongoing management and maintenance of the cover pool upon the credit institution’s insolvency to ensure the timely payment of covered bondholders

Source: The European Covered Bond Council

The predominant class of cover assets are residential mortgages and public sector loans. In more recent times, the market has been dominated by residential

mortgages. In Germany for example, the withdrawal of public sector guarantees from the Landesbanken reduced the supply of public sector assets.

Covered bonds are issued under specific legislation, or on a private (unregulated) contractual agreement basis that uses structured finance architecture to replicate the economic benefits of covered bonds. Having specific regulation is necessary in certain legislative frameworks to ring fence the assets in the cover pool from other creditors, and allow the cover pools to be replenished with assets that would otherwise be available to these other creditors, (known as 'encumbrance' of these assets) and in certain cases to place limits on the amount of overall encumbrance permitted.

Having specific legislation can increase certainty around rights to assets in the event of issuer default. It may also be used to set down minimum standards of issuer reporting and asset management, define the type of asset eligible for the cover pool (type, location), establish the requirements of the issuer to top up the pool to maintain overall credit quality and include provisions for the full segregation of the asset pool from the issuer in the Special Purpose Vehicle ('SPV'). These provisions are designed to reduce uncertainty for the investor and should reduce costs associated with economic, structural and operational design of these areas.

How do covered bonds compare with other types of long-term funding?

In contrast to traditional Asset Backed Securitisation (ABS) covered bonds structures are primarily dependent on recourse to the issuer, with the cover pool a secondary source of collateral. Recourse to the issuer may mean recourse to the Sovereign State in the event of a bailout or other means of state support, and covered bonds share features with bank-issued unsecured bonds and Mortgage Backed Securities (MBS). The market already assesses and prices these risks and differences.

The tables provide an overview of the benefits and limitations of covered bonds with a comparison to unsecured long term debt and MBS:

Typical benefits of covered bonds for issuers

More abundant source of funding vs. unsecured debt and MBS, in an environment where unsecured long-term funding has dried-up; this is due to the attractive dual-recourse features of covered bonds for investors.

Funding **diversification** by offering access to:

- new credit investors;
- insurance companies and asset managers; and
- investors in sovereign debt and government backed debt such as the government sponsored entities (GSE's), including Freddie Mac, Fannie Mae, Ginnie Mae in the US.

Fixed funding duration – this improves asset-liability management by adding funding certainty as compared with many ABS structures. Under **Basel III**, a funding match will have a direct positive effect to the Liquidity Ratio and the Net Stable Funding Ratio.

Accounting - loans in cover pools remain on the balance sheet at their pre-transaction value; this is generally the same for MBS issuers that hold the first loss piece. In contrast if an accounting sale occurs, in a depressed market this may mean that losses are realized.

Growth of investor base - improve awareness of the issuer by communicating to a wider investor base, with details of their business model and strategy.

Regulators view covered bonds positively as they provide an incentive for prudent loan origination e.g. loan-to-value limits, credit risk assessment for the pools, and the monitoring of loan performance, provided that asset encumbrance is limited.

Relatively simple to communicate to all stakeholders and investors, covered bonds can be more transparent than securitization structures, have recourse to the issuer and a single cover pool, generally have no tranching and are designed to maintain a high credit quality.

Limitations of covered bonds for issuers

No de-leveraging / reduction to risk-weighted assets (RWAs) or lower capital requirement, as cover assets stay on the balance sheet.

Need to maintain origination pipeline for duration of issued bonds maturities limiting ability to disengage from the market.

Asset encumbrance limits set by regulators may restrict issuance to a percentage of balance sheet assets. Rating agencies will also factor encumbrance into their rating of unsecured debt issued from the same balance sheet (although diversity of funding sources may offset this).

Additional operational requirements such as collateral monitoring, testing and reporting. With the regulatory environment continuing to change the full cost of regulatory compliance for each type of bond is not known and fully incorporated into product pricing.

Accounting can be complex if separate SPVs are used; however, the consolidated balance sheet of the issuer is straight forward.

Benefits of covered bonds for investors

Preferential weighting for liquidity requirements for banks: Under Basel III, for the purposes of calculating the **Liquidity Coverage Ratio (LCR)**, covered bonds qualify as “Level 2” assets and have 15% haircut. Level 2 assets may account for 40% of liquid asset stock. MBS, (in the US other than those guaranteed by GSE's), may not qualify as highly liquid assets; however final proposals and national implementation will determine this. Those asset classes meeting liquidity requirements can be expected to be in high demand, with a consequential impact on spread differentials to those that are not deemed liquid assets.

Transparency and simplicity of covered bond programs can be greater than for many securitisation products, with a simpler structure and single cover pool.

Insurance firms benefit from higher investment limits subject to regulations concerning this sector (e.g. in the UK insurance companies can invest up to 40% of assets in regulated covered bonds), providing a broader investor base than for MBS.

UCITS (Undertakings for Collective Investments in Transferable Securities; a European Commission directive providing a framework for retail investment funds) – recognising the high credit quality of covered bonds, UCITS allows investors higher concentration limits for covered funds than for other investments (e.g. 15% for a particular covered bonds obligor, compared with the general limit of 3%).

UCITS also have higher prudential investment limits at 25% of total assets invested vs. a 5% normal limit.

Both of these allow greater holdings of covered bonds, as compared with other assets.

Bullet repayments - cashflows are not directly tied to the covered pool. The bonds do not amortize with loan repayments as they typically do within an ABS structure which reduces extension risk for investors. With no early redemption considerations investors are better able to use covered bonds in ways consistent with duration considerations of conventional bonds. With reduced complexity in asset management, the bond factors and principal prepayment complexities of MBS do not arise.

This has been a point of differential, but in recent years some recent MBS deals have incorporated options allowing investors to put their notes back to the originator at a given maturity.

Solvency II – The 0.6% spread risk factor assigned to AAA-rated regulated covered bonds fulfilling certain criteria of the UCITS Directive is lower than the 0.9% factor assigned to AAA-rated senior unsecured and corporate bonds. This means lower losses in a shock scenario and a lower capital requirement.

Issuer and investor interests are aligned as the issuer retains the credit risk of the assets in the cover pool or “**skin in the game**”. The ‘originate and distribute’ model was subject to criticism during the financial crisis, particularly in the US. Both Dodd Frank and Basel have measures which require the retention of credit risk in the loans of at least 5% of the loan issuance value (which may be met by various means) on the issuers’ balance sheet when they issue MBS. The issuer retains a 100% interest in the asset pool of a covered bond, incentivizing them to focus on credit quality.

Limitations of covered bonds for investors

Some **Issuer discretion** over quality of replacement cover pool assets during life of a particular issue, which can impact refinancing and credit risks.

Limited ability to hedge via credit default swaps due to the combined sovereign, issuer and asset based exposures.

Limited floating rate issuance of covered bonds.

Valuation of positions can be complex due to sovereign risk implied from originator default risk.

Lack of standardization of covered bond regimes and structures. Each country and each structure that has unique or innovative features will require separate analysis.

Covered bond regulatory regimes

Europe

Covered bonds have been in existence in Europe for over 200 years and have been a major source of funding. The regime regulating covered bonds in Europe is more established than in most other jurisdictions. However, despite the rule-driven approach taken in Europe, there is actually no single, harmonized framework that governs covered bond programs across the continent. General requirements for issuers, competent authorities and the provisions on ring-fencing of assets in the event of bankruptcy lie within the national regulatory and legal frameworks. As a result, the prescribed 'safeguards' vary, meaning there is a need for investors to be well educated over program eligibility criteria as well as evaluating the underlying assets of the covered bond pool and how they can change over time.

The degree and quality of supervision of regulated covered bond programs is a critical factor in maintaining investor confidence in the sector. The FSA for example, published new tighter standards in November 2011 to make features of the UK regime more comparable to that of other European countries. The new requirements go into effect as of 1 January 2013.

Using the UK framework as a basis, some of the 'best-practices' under European regimes include the following characteristics:

- The deposit-taking institution (issuer) must register with the national regulator;
- The special purpose vehicle (SPV) holding the cover pool must be domiciled in the home market;
- Full segregation of the asset pool from the issuer in a separate legal entity (the SPV) on which bondholders have a priority claim if the issuer becomes insolvent;
- Only eligible property as defined in the legislation (e.g. type, location etc) can be used as collateral;
- Prior notification of, and information related to each bond issuance is provided to the regulator;
- Prior notification of covered bond cancellation;
- Notification to investors of any significant substitutions made to the cover pool (where permitted and usually set by an over-collateralisation threshold such as 5%);
- Disclosures of program documentation and any updates or changes;
- Monthly or quarterly cover pool information including loan characteristics (stratified and individual loan basis) must be made available;
- Monthly information on the asset and liability profile;
- The role of the signatory of the annual confirmation of compliance, and the compliance function in general;
- Annual attestations by Senior Management that the programs comply with the local regime regulations; and



- Independent legal and audit opinions on the compliance of the issuer and program with the regulations.

In applying for regulated covered bond status, supervisory expectations focus on:

- The competency of the proposed oversight and governance framework in managing the risks of the program;
- The appropriateness of systems and controls in relation to risk management, underwriting, arrears and valuation;
- Proficiency of cash management and servicing functions;
- The quality of eligible assets in the cover pool;
- The availability of assets in cover pool to mitigate risks such as asset-liability mismatching, market value, interest rate, currency risk; and
- Ability to substitute assets on the issuer's balance sheet to meet cover pool requirements.

Enhancing transparency with the regulated programs has been another important area of reform.

The FSA has introduced new requirements on public disclosures:

- The designation of asset pools as compared to a single class of eligible assets or a mixture of eligible asset classes; and
- The provision of the following information on a secure, subscription-only website:
 - Transaction documents;
 - Link to the latest program prospectus;
 - Characteristics of the asset pool each month; and

- Loan-level information on the asset pool each reporting period (typically monthly or quarterly depending on applicable regulations).

Over the past decade, other European countries have issued or amended their legislation in response to financial innovation and the introduction of pan-European rules, such as the Capital Requirements Directive (CRD).

The latter sets standards for the collateral eligible for the cover pool in terms of the types and quality of the collateral as follows:

- Exposures to governments or other public sector entities in the EU;
- Exposures to non-EU governments and public sector entities that qualify as the highest quality credit 'step' as defined in EU regulations;
- Loans secured by residential or commercial real estate with Loan-to-Value (LTV) ratios not higher than 80% and 60%, respectively;
- Loans secured by ships with an LTV ratio not higher than 60%; and
- Exposures to banks that qualify for credit quality step 1 not exceeding 15% of the cover pool.

Asia Pacific

Some of the newer covered bond markets are found in Asia Pacific where regulators have introduced legislation or are in the process of doing so. In Australia, for example, new legislation was introduced in 2011, followed by significant issuing activity from all major Australian banks (ANZ, CBA, NAB, WBC) with many offers oversubscribed. The framework is not as comprehensive as some of the European frameworks; Australian issuers are not required to obtain authorisation from their regulator to issue, nor is there a public register of the issues. All programs by the large banks so far allow for AUD- denominated residential assets with maturities up to 30 years, where collateral is typically first lien mortgages. AUD-denominated bonds account for over 35% of all Australian covered bonds issues, with another one-third being Euro-denominated securities, and further Australian issuance in USD for US investors. Australian issuers have used multiple tranche structures, issuing fixed and floating rate issues, with different maturities, from the same program and cover pool.

The Australian covered bond market stands to gain further from the positive assessment of rating agency Standard & Poors (S&P). S&P has placed Australian covered bond programs in “Category 2” under its methodology. This means that Australian covered bond programs are categorised similar to Canada and a number of European countries. The categorisation is significant in terms of the potential ratings uplift (4-6 notches)

vs. the stand-alone rating of the issuer. The programs of big banks could therefore preserve ‘AAA’ rating status over the medium term, whereas smaller Australian banks which are lower rated could potentially achieve fairly high ratings on their programs (but with restricted issuance capabilities). Issuance outside the four major domestic trading banks has already started to occur with Suncorp’s inaugural issue of \$750million being expected to increase to around \$1.1billion due to strong investor demand.

In May 2012, new legislation was introduced in the New Zealand parliament to enhance the country’s existing framework. Covered bonds have been issued in NZ over the last two years under unregulated contractual agreements. The new proposals follow protocols from Europe for the purposes of building-up investor confidence. Under the new rules, a register of NZ covered bond programs is to be established; cover pool assets will be clearly segregated from other assets of the issuer and are to be held in a legally separate SPV; independent cover pool monitoring will be mandatory, and the treatment of cover pool assets in the event of bankruptcy of the issuer is defined.

In putting forward proposals for new rules, Singapore has taken a ‘legislative light’ approach in respect of asset segregation requirements, intending to rely on existing legal and contractual frameworks, at least until the market is established but has set criteria around asset quality and monitoring of assets as well as minimum over-collateralisation.

US

On March 8, 2011 the 'United States Covered Bond Act of 2011' was introduced to establish standards for covered bond programs and a covered bond regulatory oversight program. The Act was approved by the House Capital Markets Subcommittee in June 2011, but has yet to be passed by the House of Representatives. A proposal in March 2012 to include covered bond legislation as part of the 'Jumpstart Our Business Startups Act' ('JOBS') was not successful, so a statutory foundation remains stalled in the near term.

US mortgages have recently attracted limited investor appetite other than MBS backed by guarantees from GSE's. A medium term driver for covered bonds in the US is the Treasury plans to wind down the GSE's, which continue to require significant Treasury support. A number of scenarios have been proposed for their replacement, with covered bonds being considered as part of these options. The protections offered by the covered bond framework may provide useful assistance in getting private investment back into the US mortgage market.

Only two US covered bonds have been issued, in 2006 and 2007, and these were put in place contractually, without the benefit of covered bond legislation. The SEC position on RBC's recent covered bond issue is expected to expand the market for similar issuers. The lack of a statutory framework is an adverse factor for potential new issuers and investors, as additional costs are incurred to achieve the level of creditor protection found in other jurisdictions.

Canada

On April 26th, 2012 the Canadian government introduced covered bond legislation to parliament which is expected to be implemented by June 2012. There was market expectation for some time now for specific legislation to be introduced in Canada. All currently outstanding covered bonds were issued by Canadian banks on the basis of contractual agreements governed by common law. Canadian financial institutions and co-operatives would become registered issuers under the new framework, provided they pledge not to issue covered bonds outside the framework.

One significant feature of the newly proposed legislation is the prohibition of mortgage insured collateral in the cover pools. The bill does not allow for the use of collateral insured by agencies such as the CMHC, Canada Guaranty Mortgage Insurance Company, Genworth Financial Mortgage Insurance and PMI Mortgage Insurance Company Canada. The bill sets an 80% Loan-to-Value threshold for the inclusion of loans in the cover asset pool. Existing covered bonds with insured mortgage collateral will be grandfathered.

In response to the new legislation, rating agencies have indicated that the cost of future issuance under such programs could increase as a result of the need for higher credit enhancement level. This higher cost of funding could potentially cause banks to raise mortgage rates which in turn would have a dampening effect on lending and Canadian house prices.

Emerging Regulatory Trends - Issuance limits and subordination of unsecured debt

In the wake of concerns over encumbrance and increased subordination of unsecured debt holders, regulators have started to define and set thresholds to limit the issuance of covered bonds.

There has been no consistent criterion or methodology in setting the limits, as the following examples indicate:

Country	Issuance / Asset limit	Qualifications
Italy	Variable	Depending on the capital ratio of the bank, there are limits on the amount of assets that can be transferred to the SPV vs. the total volume of assets eligible as collateral on the balance sheet of the bank. Restrictions are lower for banks with higher capital ratios.
Spain	80% Mortgages 70% Public	The issuance of mortgage covered bonds is limited to 80% of eligible mortgages. Public sector covered bonds are limited to 70% of eligible public loans.
Netherlands	Not fixed	The regulator sets a nominal limit of covered bonds outstanding versus the total assets of the issuer bank on a case-by-case basis and so that the ratio remains at a 'healthy' level.
UK	4% - 20%	When the bond issuance reaches 4% of total assets, the FSA expects the issuer to discuss possible implications of the issuance and mitigating actions. The upper soft limit is understood to be at 20% of total assets, though actual limits vary on a case-by-case basis and in context of the Supervisory Review and Evaluation Process (SREP).
US		The FDIC suggested that the outstanding volume of covered bonds shall not exceed 4% of liabilities.
Canada	4%	The limit for covered bond issuance is 4% of total assets.
Australia	8%	The cover pool size is limited to 8% to the issuer's domestic assets.
New Zealand	10%	Cover pool size is limited to 10% of the issuer's assets.
Singapore	2%	Proposed cover pool limit of 2% of issuer's assets.

Impact of other regulatory changes

The traditional investors in covered bonds are banks, asset managers (including pension funds) and insurers, which together have taken around 80% of issued covered bonds.

They now face and are responding to new regulatory environments and are re-assessing their investment strategies accordingly. The main drivers are:

- Solvency II for European insurers requires increased capital holdings against assets with long maturities. The capital requirements provide a disincentive for those institutions to hold such assets. However, covered bonds have lower risk weighting than other bonds from the same issuer with similar rating and maturity which makes these instruments more attractive to investors that have to comply with Solvency II.
- Basel III for banks, as currently drafted, gives covered bonds preferential liquidity treatment for investors, as compared with bonds of the same maturity from the same issuer, therefore contributing positively to the liquidity coverage ratio and to incentives for banks to hold them.
- For issuers of unsecured bonds, MBS or covered bonds, there are no specific liquidity regulations, other than that each provides a source of funding that must be modeled in stressed conditions. Access to multiple sources of funding proved to be an advantage during the financial crisis and covered bonds proving resilient throughout the period of stress.
- The capital requirements under Basel III for issuers' of covered bonds will be no greater than when the underlying assets are held on the issuer's balance sheet. For MBS issuers it may be possible to reduce capital requirements if significant credit risk is transferred to third parties using an off balance sheet entity, an option not available to covered bond issuers.

Recent Issuance Trends

2011 was a record year for covered bonds, with \$405.1bn issued globally, and a further \$153.3bn in Q1 2012¹. New European issuances have been of longer-term bonds, in part due to the impact of the Long Term Refinancing Operations (LTRO) being employed by the European Central Bank as part of their effort to manage the Euro crisis, which has been a source of shorter term funding for many.

Many covered bond issuers continue to use both MBS and covered bond programs. Each program has had its own investor communities until recently. The inclusion of put options on MBS deals (e.g. Permanent) in response to concerns about extension risk (the risk that bonds may not be redeemed at the expected maturity date) has increased their appeal to covered bond investors.

There has been innovation recently in the covered bond market, with the first issues of floating rate covered bonds coming from the UK in Q1 2012 allowing investors to better manage interest rate risk.

Until recently, there had been few defaults on covered bonds and the CDS market on covered bonds had been limited. The Euro crisis has heightened the likelihood of defaults of covered bond issuers and sovereigns. The risk in credit risk has triggered renewed interest in CDS protection.

A standardized covered bond CDS contract has been developed by some significant industry participants.

Pricing

Covered bond yields reflect the basket of benefits and limitations outlined, with the primary benefit being recourse to both the issuer and the cover pool of collateral.

Issuers that experience credit problems will generally have fewer high-quality assets available to contribute to a cover pool. As a result there is often correlation in credit rating and spread movement between unsecured and covered bonds from the same issuer; if cover pool collateral credit quality deteriorates so will the credit standing of the issuer along with the covered bond. This is not necessarily the case for MBS issues, which are generally bankruptcy-remote. As the issuer's credit standing is important to the covered bond investor, there is also the potential for ancillary benefit in the form of Sovereign support for the issuer, as illustrated in certain cases during the financial crisis. Conversely, declining Sovereign State credit quality is likely to adversely impact issuers due to declining macro-economic conditions weakening bank credit quality, squeezing interbank liquidity and driving up funding costs.

¹ Source - Dealogic

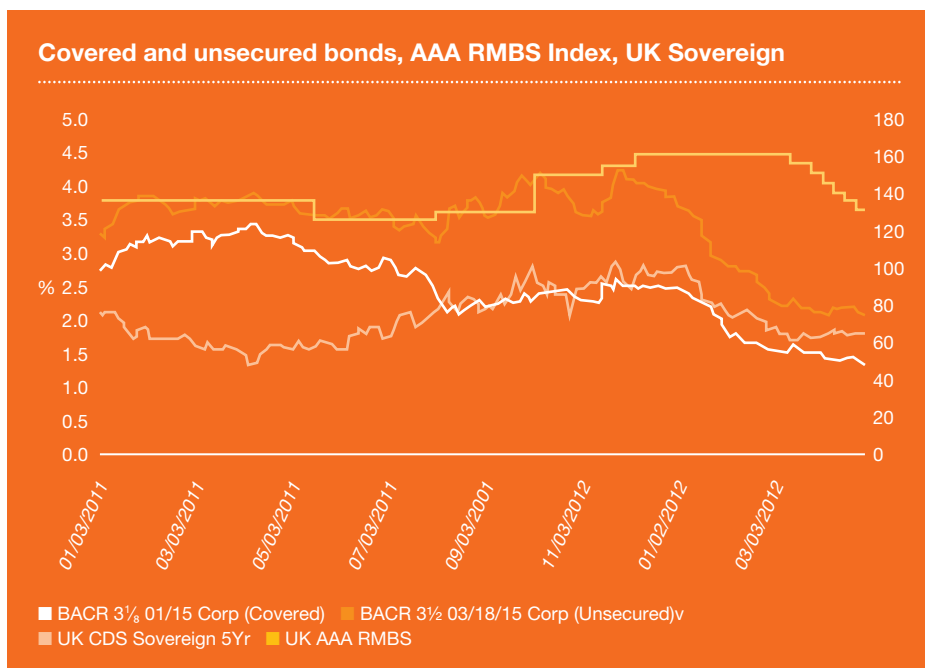
2011 was a record year for covered bonds, with \$405.1bn issued globally, and a further \$153.3bn in Q1 2012¹.

**\$405.1
bn**

**in
2011**

Comparing covered bond yields with senior unsecured bonds and RMBS for UK AAA spreads (see graph below) illustrates the impact of the economic factors previously described at play. Lower yields are found for the covered bonds reflecting the dual nature of the credit protection available to bondholders, and with a few exceptions this has been the experience of the class more widely.

Sovereign risk has an impact from the reduced ability of sovereigns to support issuers, and in the event of a sovereign default, issuer default risk may increase and the ability of a third party to administer the covered loans decrease. We have included UK sovereign CDS spreads to illustrate correlation over this period.



The Eurozone crisis continues, with the economic situation having a direct impact on asset quality by increasing default risk and reducing recovery rates. Eurozone risk is likely to remain in the medium term, a product of political risk and the limits of the ECB and sovereign government. Covered bonds of banks with a high periphery exposure and/or weaker capitalisation are likely to see wider spreads against their senior unsecured debt.

Key steps towards establishing a covered bond program

As illustrated in the table below, developing a successful covered bond program is a complex process that requires a thorough analysis of legal, treasury, accounting, tax, regulatory, system and reporting process considerations. PwC's long-standing experience assisting European covered bond issuers can help new issuers navigate through these complexities.

Next step	Your objectives	How PwC can help
Strategic Analysis	<p>Assess whether covered bonds would be beneficial to your business. Cost benefit analysis including:</p> <ul style="list-style-type: none"> • comparison with existing funding sources and costs; • regulatory capital including liquidity analysis and leverage ratios; • accounting impacts; and • tax effects 	<p>Feasibility studies, including:</p> <ul style="list-style-type: none"> • portfolio stratification and performance analysis to allow assessment of potential funding costs; • benchmarking of alternative funding costs; • regulatory and accounting advice; and • tax assessment
Pre-issuance preparation	Organising your issuance to achieve best pricing for your business and the cover pool assets available	Review of reporting requirements, stakeholders, reporting timetable and dependencies
	Effective project governance and cost management	Creation of project sponsorship and governance framework, identification of all stakeholders, budgets, timelines and project goals
	Ensuring data quality and reporting requirements can be met	Review of quality of data to be used as inputs for regulatory and financial accounting reporting
	Effective and timely communication with stakeholders within your business	<p>Developing 'golden source' data warehouses and data quality controls</p> <p>Development of reporting and analysis on Issuer including business model and margins</p>
Obtaining best rating achievable for issuance and issuer	<p>Walkthrough of methodology of each rating agency, including of encumbrance on issuer</p> <p>Design and effectiveness review of existing operational and financial control processes and monitoring tools and templates</p> <p>Development of reporting systems and processes including in respect of cover pool monitoring and other regulatory reporting requirements</p>	

	Obtaining regulatory buy in and approval	Assistance with the preparation of regulatory applications and communication with regulators
	Ensuring tax compliance	Review of tax implications of structure and liaison with national tax bodies
Issuance	Well received entry to market	Project management of all parties to ensure key milestones are met and stakeholders communicated with on a timely basis
	Effective management of transaction parties and processes	Tax advice and support and ongoing communication with national tax bodies
	Ensuring capital market entry requirements are met	Transaction support including asset due diligence, and verification of prospectus data on cover pool
Post-issuance	Compliance with ongoing regulatory reporting requirements on cover pool quality and level of collateralisation	<p>Monitoring and testing of cover ratios for investor and regulatory reporting, stress testing and analytics as part of cover pool monitoring and other requirements</p> <p>Assurance in respect of requirements for Management Information completeness, quality and accuracy, reporting and distribution.</p> <p>Review of price testing and valuation processes and controls</p> <p>Benchmarking against market practice</p>
	Maximising value to be gained from data analysed as part of cover pool assessment	<p>Data mining and analytics of cover pool to identify customer behaviours, development of strategic responses</p> <p>Entity wide consistency review; use of data for regulatory and financial reporting, RWA and liquidity analysis, funding reporting</p>
	Identification of and preparation for new regulatory and financial reporting requirements, as Dodd Frank, Solvency II, Basel III and other regulatory requirements are developed by national regulators	Regulatory and financial reporting updates

Contacts

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