

Rating Methodology

Covered Bonds

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Call for comments

Scope welcomes market participants' comments on its proposed methodology. Please send your comments by 3 April 2015 to service@scoperatings.com.



Table of Contents

The Methodology: Area of Application	3
Summary	3
Call for Comment Response Deadline	5
Methodology	5
General foundations	5
Balancing bank and covered bond specific risks	5
Balancing fundamental and quantitative analysis	5
Legal framework analysis	6
Resolution regime analysis	7
Cover pool analysis	8
Asset credit risk modelling	9
Cash flow modelling	10
Modelling refinancing risk	11
Availability of overcollateralisation	12
Counterparty risk	12
Sovereign risk	13
Sensitivity analysis	13
Transparency on risk drivers	13
Appendix I. Rating symbols and definitions	14
Appendix II. Liquidity risk mitigation mechanisms	16
Disclaimer	17



The Methodology: Area of Application

Scope Ratings (Scope) is requesting comments on its first rating methodology to assign covered bond ratings to European issuers. This proposed methodology takes into account the significantly changed regulatory and supervisory framework applicable to financial institutions, in particular the introduction of the Bank Recovery and Resolution Directive (BRRD) in the European Union on 1 January, 2015 as well as similar resolution regimes in other countries. It also reflects the importance of covered bonds in the regulatory and supervisory frameworks and for central banks' monetary policy.

This proposed methodology will apply to all covered bonds that benefit from a dual recourse to both a financial institution and a ring-fenced cover pool. Typically, a financial institution is responsible for the timely and full payment of interest and principal (first recourse). In contrast to other parts of the bank's liability structure, covered bonds are excluded and hence protected against an issuer's restructuring or resolution, which is the envisaged rescue mechanism for a bank in distress. Even in the unlikely event of an issuer default, covered bonds should in general not accelerate and a cover pool of eligible assets remains available to substitute for the issuer's obligation to service the bonds (second recourse).

The proposed methodology should be read in conjunction with Scope's Bank Rating Methodology, Scope's legal considerations as well as other methodologies applied in structured finance. This methodology may be selectively applied to non-European issuers when considered appropriate.

Summary

Scope's proposed covered bond rating methodology (the methodology) sets the framework for the rating assessment and regular monitoring of covered bonds. We will apply the basic structure of the rating approach across markets to ensure comparability and consistency but will incorporate credit relevant jurisdiction specific features.

We believe that the much enhanced regulatory architecture, in particular the introduction of the BRRD 3 as well as similar resolution regimes in other countries, have significant implications for covered bond ratings. The former base case for a covered bond analysis – i.e. the issuer is insolvent and the cover pool becomes the sole source of repayment for the covered bond – has become extremely remote in the current post-crisis regulatory environment.

The analysis of the first recourse (the issuer), the legal and resolution frameworks and its impact on the covered bonds are the lynchpins of our covered bond analysis. Once a regulated bank has passed the resolution trigger – the point of non-viability, unsecured bank investors are directly exposed to the risk of a potential bailin. Covered bonds, however, are one of the few types of bank liabilities that will not be subject to a bailin and are expected to continue to perform and to benefit from the business continuation of the issuer. The need to rely on the second recourse (the cover pool) will only arise when i) available regulatory capital is fully depleted, ii) significant amounts of bailinable debt converted into capital or written down are not sufficient to ensure the business continuation of the issuer, and iii) the restructured or resolved bank becomes insolvent. The rating of a covered bond therefore must reflect this high degree of protection, which is unique within the liability structure of banks. Scope's rating methodology reflects the crucial importance of the regulatory framework applicable to the first recourse to assess a covered bond's credit risk. As a result, before considering the benefit of the cover pool, Scope considers that a covered bond issued by a resolvable bank presents a credit risk enhancement up to six notches above the Issuer Credit Strength Rating (ICSR) of the bank.

Scope's analysis also takes into account the benefits from a second recourse to the cover pool. However, the chain of events leading to recourse to the cover pool is extremely improbable under a post-crisis resolution regime. Covered bonds have not defaulted over the last centuries and the bailin framework further enhances

February 2015 3 / 17

¹ "Bank Rating Methodology", published February 2014

² "Legal Risks in Structured Finance – Analytical Considerations", published January 14, 2015, as well as "Rating Methodology Guidelines: Structured Finance Instruments (SFI)", published July 2014

³ Directive 2014/59/EU of the European Parliament and of the council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms.

the likelihood of ongoing performance. Scope nevertheless recognises that the credit quality of cover pools differs significantly from one issuer and covered bond type to another. In addition, the management of risks varies according to the issuer's degree of management discretion. Scope therefore performs a thorough analysis of the cover pool because it provides key information about the robustness of the covered bond's second recourse and, ultimately, the magnitude of the expected loss for the instrument. Scope believes that the cover pool can generally further enhance the credit risk of the instrument by up to three notches above the uplift already provided by the fundamental status of covered bonds and the regulatory framework of the issuer.

The consequence of this rating approach reflects Scope's view that:

- The issuer's ICSR is the fundamental anchor point for the covered bond analysis;
- The combination of the legal and resolution framework establish the most important supporting elements for the covered bond rating;
- The benefit of the cover pool represents a second recourse coming after a chain of events affecting the issuer. The benefit of the cover pool is therefore limited but it provides additional security and stability to the rating.

Figure 1 below highlights the building blocks of Scope's covered bond methodology.

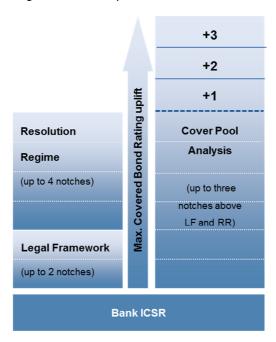


Figure 1: Covered bond rating building blocks

Covered bond ratings are in general linked to the bank's ICSR. The exception to the rule are cases where the influence of the issuer on a covered bond risk and refinancing structure is mitigated with features similar to that of a structured finance transaction. This is the case, for example, of covered bonds which become pass-through structures after meeting certain criteria. Covered bond ratings for highly rated banks are primarily driven by the fundamental benefits of the regulatory framework applicable to banks and their covered bonds. The rating impact of the cover pool becomes material only when the credit quality and thus the bank ratings start to migrate downwards. As a result, the prudent management of the covered bond programme and the extent to which the remaining credit, market and refinancing risks are mitigated particularly impact the ratings of covered bonds issued by lower rated banks.

Scope will perform and publish a detailed quantitative analysis of the cover pool for programmes from both highly and lowly rated issuers. This is because the cover pool analysis helps to understand the likely stability

February 2015 4 / 17

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⁴ We expect to rate such a covered bond similarly to a securitisation with the same or similar asset risk characteristics. In contrast however, we take into account the dual recourse and the fact that such a covered bond structure would at least rank pari passu with senior unsecured debt.



of the covered bond rating, the efforts issuers have to make to manage risks prudently, or the levels of overcollateralisation they have to provide to mitigate these risks. In addition to an assessment of the pool's current risk exposure, our analysis aims to provide guidance on the drivers for potential rating migration.

Scope's approach also factors in the dependency on key counterparties as well as our assessment of the credit fundamentals of the relevant sovereign and how they could impact the cover pool analysis.

Scope plans to issue subsequent documents providing further details on the assumptions and stresses applicable to assess various types of cover pool and other structural risks. Scope's covered bond ratings will be subject to ongoing surveillance.

Call for Comment Response Deadline

Scope Ratings welcomes comments from market participants on its proposed covered bond rating methodology. Please send any comments to service@scoperatings.com by 3. April 2015.

Methodology

General foundations

Scope's covered bond rating is closely linked to the ICSR of the bank issuer – but it is generally higher. The bank's ICSR expresses our view on the likelihood of a regulatory action, which is the typical default-like scenario for a bank. Higher-than-ICSR ratings for covered bonds predominantly reflect their different treatment in bank resolution and recovery regimes, provided the covered bonds fall under the relevant regulatory definition in the resolution regime. They also rest on the assumption that a dedicated, ring-fenced cover pool of typically low credit-risk assets can replace the bank's obligation to ensure that payments on the covered bonds can be made in full and in a timely manner.

Scope's covered bond ratings reflect the fact that an investor is only exposed to a loss on the promised covered bond payments if the following two conditions occur, in this order: i) the issuer is in default and ii), assuming stresses that are conditional to the distance between the ICSR of the issuer and the covered bond target rating, the covered bond structure is not able to support full and timely repayment on its own. Covered bond ratings therefore reflect the probability of insolvency of both the issuer and the cover pool and the associated expected loss.

Applying our knowledge of the local markets in Europe, the methodology considers the dynamics and constraints that may be specific to each region, market or market segment. These specifics are, in particular, relevant for the calibration of the stresses we apply to determine whether an additional credit differentiation based on the credit strength of the cover pool is warranted.

Balancing bank and covered bond specific risks

As a bank's performance cannot remain immune to an economic slowdown or a recession, the risks in a covered bond cover pool will not be immune either. The specific cover pool management can, however, mitigate or even amplify such developments. This is why Scope performs an independent analysis of the cover pool.

The cover pool analysis reflects how possible changes to a covered bond structure add to, maintain or reduce existing risks arising on amortisation of assets, new additions to the cover pool as well as changes to the covered bonds' cash flow structure. While macroeconomic factors such as house price developments are likely to impact all covered bonds with the same collateral in a given country, differences in the composition of cover pools, in risk mitigation strategies as well as cash flow structures give rise to risks specific to each covered bond that are incorporated into our ratings to provide adequate differentiation.

Balancing fundamental and quantitative analysis

Legal covered bond frameworks are designed to mitigate credit risk in a covered bond and to isolate the structure from insolvency of the bank. However, unlike certain structured finance instruments that achieve a strong delinkage from bank credit counterparty risk, covered bond ratings are dependent on the ability of the

February 2015 5 / 17



bank issuer to adequately manage the cover pool risks. Covered bond ratings therefore reflect a combination of fundamental and quantitative assessments, both of which are integral to a thorough understanding of covered bonds.

We believe that the strong support provided by fundamental and qualitative factors to covered bonds means that their credit quality far exceeds the level of risk suggested by the issuer's ICSR. In most cases a fundamental analysis therefore justifies a covered bond rating above the ICSR. Any further credit differentiation above this fundamental uplift will stem from the additional comfort provided by the covered bond's country, issuer and cover pool specifics.

Legal framework analysis

The analysis of the legal framework governing the issuance of covered bonds seeks to determine whether i) the framework provides sufficient protection to legally allow for uninterrupted payments on the covered bonds; and ii) the structure could be affected by a moratorium or insolvency of the issuer. Furthermore, iii) the analysis must identify whether the covered bonds can benefit from the preferential treatment of the resolution regime. Lastly, iv) the analysis of the legal covered bond framework also supports the quantitative analysis, as we will be able to identify whether and how the framework further reduces the probability of default and mitigates the loss given default of the covered bonds.

Asset isolation is at the core of the covered bond definition, alongside the dual recourse principle. It is one of the areas where the most diligence is performed when a covered bond framework is set up by regulators or a specific covered bond structure is set up by issuers, often taking into account the preferences of investors as well. We therefore expect covered bond structures to address these requirements in full. When the asset isolation is sufficiently robust, we consider an additional elevation of the covered bonds above the ICSR.

Rating considerations in the legal framework analysis

In particular, in the legal framework analysis we seek to understand whether the framework establishes:

- Clear, legally valid, binding and enforceable segregation as well as maintenance of cover pool assets and related derivatives upon a resolution or insolvency of the issuer (in the case of an on-balance-sheet structure) or valid perfection of transfer and a true sale in the case of covered bonds that use an SPV structure:
- How the covered bond structure's ability to continue making uninterrupted payments of interest and
 principal on the covered bonds and derivatives according to the original terms and conditions is
 documented. We would expect that neither a resolution event, nor a moratorium nor an insolvency of the
 issuer should impact the ability to make such payments. Furthermore, neither privileged derivatives nor
 liquidity facilities contracted for the benefit of covered bonds should terminate upon a regulatory-driven
 restructuring, moratorium or insolvency of the bank and there should be no acceleration of the covered
 bonds in case of an issuer default;
- Readily available as well as documented programme enhancements should remain available, valid and enforceable vis-à-vis other creditors after a resolution event or insolvency (i.e. a level of overcollateralisation that is higher than the statutory minimums or other maintenance obligations);
- Neither a regulatory action nor an issuer event of default should impact the ability to manage the covered bond structure in the best interest of investors. We would expect the framework to allow for proactive liquidity management for the benefit of covered bond holders and we would seek to understand how, in the case of a regulatory action or an insolvency, a potential conflict of interest between covered bond holders and other debtors is resolved;
- Independent and regular oversight of the programme structure (asset composition/ structural risk) by either the supervisor or a special trustee.

February 2015 6 / 17



Importance of regulatory covered bond definitions

The BRRD and similar resolution regimes in Europe expect the legal setup for covered bonds to at least follow the definitions given in Article 52(4) of the UCITS⁵ Directive. The legal covered bond framework analysis also helps us to understand whether these broad definitions are met and whether we can provide the benefit of the resolution regime in the covered bond rating.

Market stakeholders, however, not only aim to allow for UCITS compliance but also expect that additional regulatory requirements stipulated for covered bonds in article 129 of the CRR⁶ are met. Additional provisions try to specify how credit and cash flow risks are mitigated, while also addressing the ability to make timely as well as full payments on the covered bonds. The analysis of the legal setup therefore also makes it possible to identify these relevant aspects for the cover pool analysis.

Covered bond frameworks vary significantly in view of the differences between common and civil law systems, insolvency regimes and mortgage markets. The legal framework analysis supporting covered bond issuance therefore has to be country- and possibly also issuer-specific. Furthermore, it needs to take into account relevant changes in general insolvency regimes, developments in consumer protection laws and other regulations that are relevant to the enforceability of cover assets.

The legal analysis is not static, as stakeholders are constantly refining and harmonising covered bond frameworks. Regulators, in particular, want to ensure that the preferential risk weighting for covered bonds is sufficiently justified and the European Banking Authority's proposal of best practices actively encourages further refinements. As a result, some countries have already aligned their existing framework (e.g. the Netherlands) or are currently soliciting feedback (Spain) for further amendments to existing covered bond frameworks.

The creation of a harmonised pan-European covered bond framework will take time and that differences in frameworks will probably persist. The legal framework analysis helps to identify these differences and their relevance for the covered bond analysis. We do not expect uniform standards or similarly high degrees of sophistication in all the frameworks. We rather seek to understand how minimum standards relevant to the ability to make uninterrupted payments according to the original terms and conditions are provided and how they are impacted by regulatory-driven resolution events or, in extreme cases, a covered bond issuer's insolvency. We also aim to understand whether additional covenants, which can survive both the regulatory restructuring and the insolvency of the issuer, can be contractually agreed and relied on in the quantitative analysis of the cover pool.

According to our approach, a robust legal framework may therefore enhance the credit risk of a covered bond up to two notches above the ICSR.

Resolution regime analysis

Scope's view is that the much enhanced regulatory architecture, including the introduction of resolution and recovery regimes, strengthens the stability and predictability of bank ICSRs. Improved capitalisation levels and the availability of additional bailinable debt will further increase banks' loss-absorption capacity, effectively facilitating resolvability. These measures were designed to avoid having taxpayers shoulder losses of a failing bank. However, they also provide additional protection for covered bonds. The level of stress a bank can absorb before payment out of the cover pool becomes necessary has significantly increased. Consequently, in a resolution regime scenario, covered bonds exhibit a significantly lower probability of default than before. We believe that for covered bonds issued by banks operating in a resolution regime environment similar to the BRRD, full reliance on the cover pool will become an extremely unlikely event compared with the pre-resolution regime situation.

In analysing the resolution regime, we seek to determine whether country- or issuer-specific aspects could

February 2015 7 / 17

⁵ Article 52(4) Directive 2009/65/EC of the European Parliament and of the Council of 13 July 2009 on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS) for requirements; see Appendix for the full definition.

⁶ Regulation (EU) No 575/2013 on prudential requirements for credit institutions and investment firms (CRR).



impact the ability of regulators to restructure or resolve the bank and what the likelihood of insolvency of the issuer will be. We assess the clarity and predictability of implementation by regulators of the resolution framework, which also reflects the transparency of processes. We further seek to incorporate the supervisory treatment of voluntary and contractually committed overcollateralisation over and above the statutory minimum requirements. The resolution regime analysis will in this context also seek to understand how supervisors decide on the bailin of unsecured liabilities and to what extent systemic considerations are relevant. We believe these aspects are important to understanding the ability to maintain covered bonds as a going-concern funding instrument – even during the resolution process. If we believe a regulatory action regarding the issuer is unlikely to impact a covered bond as a going-concern instrument, we tend to translate this reduced likelihood of default by assigning up to four notches of uplift for the availability of such a supportive resolution framework. As pan-European harmonisation of resolution frameworks and regulatory and supervision practices are gaining ground, we currently do not expect to be able to materially differentiate the resulting benefits between countries, issuers or individual covered bond programmes.

Application in countries without a dedicated resolution framework

For countries without a specific resolution framework, we seek to understand whether the regulators tend to follow a similar proactive, transparent and predictable resolution approach when they have identified a bank that needs to be more closely monitored and eventually is likely to become insolvent. In particular, we seek to understand whether a covered bond issuer is more likely to be declared insolvent or whether the aim is to maintain the issuer and covered bonds on a going-concern basis.

Resolution regimes that maintain the covered bond issuer as a going concern require a covered bond to remain linked to the ISCR. A regulatory action that maintains the bank as a going concern will not usually decouple the covered bond structure from the issuer, nor will it cause the covered bond risks and protection structure to become static, as in the case of an insolvency or issuer default. A regulatory intervention resulting in a restructured or resolved bank will likely prompt the bank to refocus its business model and change its financial, risk and funding profiles. This will lead over time to a different cover pool risk structure compared to the pre-resolution status quo, thus highlighting the relevance of the ICSR for the covered bond rating. However, we would not expect a covered bond risk and protection structure to immediately or adversely change after a regulatory action.

Cover pool analysis

Covered bonds issued by high investment-grade-rated resolvable banks can exhibit a credit quality commensurate with AAA level, because of the covered bond status in the bailin, regardless of the level of overcollateralisation provided in their cover pool. The use of the cover pool to fulfil the payment obligations under the covered bond only becomes necessary when a resolution has failed and the issuer has defaulted.

However, a thorough analysis of the cover pool needs to be performed for all rated covered bonds. The findings inform us on how specific features of the covered bond structure as well as other country-specific aspects may affect the probability of default and the loss given default. It also provides information on the likely rating sensitivity resulting from it.

A cover pool with a strong credit profile may enhance the risk profile of the covered bond over and above the level of risk stemming from the legal and resolution framework relevant to the issuer. In general, we believe that the covered pool can lead to the assignment of a rating up to three notches in addition to the resolution-based uplift above the ICSR of the financial institution.

In our quantitative analysis, we develop a detailed understanding of the credit and cash flow risks a covered bond is exposed to. Our goal is to take account of the issuer-specific performance of the relevant assets present in the cover pool. Our base-case analysis reflects the actual credit performance of the issuer, but may also reflect generic, country- and asset-specific credit and cash-flow assumptions. Before assessing the benefit of the cover pool, Scope considers that a covered bond issued by a resolvable bank presents a credit risk enhancement up to six notches above the ICSR of the bank. To support ratings that are above the levels established in the previous step of the analysis, we increase the severity of stresses applied to the cover pool in accordance with the distance between the covered bond rating and the ICSR. Achieving an additional enhancement of the rating by one notch will in this example requires a cover pool to exhibit sufficiently robust

February 2015 8 / 17



credit characteristics to be able to mitigate stresses that are commensurate with seven notches of uplift above the ICSR of the financial institution. The higher the benefit of the cover pool to the covered bond rating, the more resilient the cover pool's credit performance has to be in case of stress.

We analyse the cover pool "as is" at the time of the report. We are likely, however, to adjust our analysis if subsequent material changes to the composition of the cover pool come to our knowledge or if our forward-looking view suggests the need to amend key variables.

Our cover pool analysis establishes rating-contingent breakeven levels of overcollateralisation that reflect our assessment of the expected loss that a covered bond may incur under stressed scenarios. Asset analysis focuses primarily on identifying the collateral characteristics driving the magnitude and pattern of asset defaults, the severity of losses upon an asset default and the dependency structure in cases of cover pools spanning multiple asset classes and geographies.

Scope applies the results of the asset analysis to a cash-flow analysis that takes into account asset prepayment assumptions, the impact of residual market risk as well as the hedging structure or senior costs of maintaining the cover pool operations. In case of liquidity shortfalls, we also model a sale of assets with discount rates reflecting the specific asset composition of the cover pool and stresses that are contingent upon the rating distance, while also reflecting country and systemic considerations.

We accompany our quantitative analysis with additional fundamental considerations reflecting the potential volatility of risk factors. Among other things, the volatility of overcollateralisation over the statutory minimums may prompt us to adjust the currently available overcollateralisation in our cover pool analysis.

Asset credit risk modelling

Eligibility criteria documented in the framework or in the specific covered bond documentation aim to mitigate the loss given default by defining certain asset classes that can or cannot be included. Statutory eligibility criteria also ensure a minimum credit quality for the cover pool. The assessment of asset risk has to be dynamic, however. In our view, deteriorating asset quality of the banking book is also likely to result in deterioration of the average credit quality of the cover assets. While the quality of the cover pool is often well above the minimum standards, it is likely to migrate closer to statutory minimum requirements, impacting both the likelihood and loss severity of defaults.

We consider in our credit risk modelling the issuer's underwriting expertise, and our base-case assumptions will typically reflect available, issuer-specific performance data. The base-case assumptions will be benchmarked against publicly available historical data and proprietary data, as well as market studies by research service providers or academic research. We will use generic assumptions resembling those used in the asset or collateral risk analysis for structured finance transactions comprising the same or similar asset classes in case the issuer is not able to provide sufficient data for performing an issuer-specific analysis.

Asset characteristics determine the credit risk modelling approach

A central aspect of the credit risk analysis involves selecting an appropriate modelling process to capture the characteristics of the collateral. Such models aim to generate the loss distribution of the collateral as a representation of the collateral assets' behaviour over time. In order to adequately capture the risks of different collateral pools, Scope applies a methodological framework that allows consistent modelling across asset classes with collateral of various granularities and homogeneities.

Scope relies on market-standard Monte Carlo simulation models to assess concentrated cover pools with limited diversification. Public sector cover pools or the analysis of substitute assets call for such an asset-per-asset modelling with detailed and specific assumptions for each asset included as collateral.

The large homogeneous portfolio approximation (LHPA) approach is used for homogeneous granular cover pools, which are typical in residential mortgage loan portfolios. Scope generally models idealised pools according to standard default probability distribution laws. This approach limits the number of inputs to i) a measure of mean default probability, ii) recovery rate assumptions and iii) a variance or correlation parameter. These inputs can be calibrated based on historical data and adjusted for the qualitative judgment on the

February 2015 9 / 17



assets in the cover pools. Where possible, they take into account the performance of these assets under identified stress scenarios, including the past credit crisis of European structured finance transactions exposed to similar collateral.

When the composition of cover pools varies, we may combine different analytical frameworks. A cover pool made up primarily of residential mortgages can be supplemented in certain jurisdictions by commercial real estate, as well as by up to 20% of "substitute collateral". Depending on granularity, we might apply similar analyses to residential and commercial mortgage loans and then combine them in our cash flow-analysis. As substitute collateral and public sector cover assets exhibit different credit and cash-flow characteristics compared to mortgage collateral, we will analyse and model them on a sub-pool basis.

Relevance of eligibility definitions

When assessing the relevant statutory or contractual provisions, we assume in our base-case assumption that the cover pool is made up of relatively granular and "plain vanilla" cover assets. In case a cover pool becomes less diversified or comprises assets whose credit performance may exhibit significantly higher credit volatility, we seek to understand whether framework- or issuer-driven replenishment criteria provide sufficient comfort for us to use the current portfolio composition as a proxy for the potential strength of the cover pool in a worst-case scenario.

Once we have assessed the credit measures for a cover pool in terms of probability and loss given default, we rarely expect asset credit risk to show high volatility in the ordinary course of business. Cover pools can be sizeable and the changes from replenishment activities rarely add materially to credit measure volatility, given the more long-term nature of both the issuer's underwriting and statutory eligibility criteria for cover assets.

In our view, a cover pool made up exclusively of large credit exposures in esoteric asset classes such as ship or aircraft loans usually exhibits higher potential credit risk volatility that cannot be assessed as reliably as for granular portfolios. As a result, we would not expect the benefit of a bespoke cover pool to translate into a significant credit differentiation in addition to the fundamental analysis based uplift.

Cash flow modelling

In our cash flow modelling, we determine the scheduled cash flows based on the cover pool assets, outstanding covered bonds and related derivatives, while also taking available overcollateralisation into account. We then apply stresses to the asset and market, in particular refinancing risks. By considering various levels of overcollateralisation, we gain insight into the ability of the cover pool to support further credit differentiation.

To establish the amortisation profile of the assets and liabilities, we use either the underlying data or detailed cash flow profiles provided by the issuer. We model cover pool performance by applying stresses that reflect the distance between the ICSR and the covered bond target rating. The wider the distance between the ICSR and the covered bond rating, the more conservative the stress adjustments will be. We apply default timing assumptions based on the observed severity of default and adjust for prepayment patterns specific to the cover pool. The liquidity premiums applied when parts of the cover pool need to be monetised will reflect cover asset characteristics as well as the rating distance the cover pool needs to support (see "Modelling refinancing risk" below).

A number of cash flow model inputs are based on factual information available in the legal documents and terms and conditions related to the issuance. However, when parameters are not contractually specified, these are incorporated into the model as variables based on Scope's qualitative assessment. Furthermore, the resulting breakeven overcollateralisation may also incorporate additional amounts to cover identified and quantifiable counterparty risks.

Due to the status of covered bonds as on-balance-sheet bank products, they also differ from securitisations in terms of risk mitigation. Whereas the focus with securitisations tends to be on crystallisation and avoidance of other than credit risk, the composition and level of risk for covered bonds also depend on the risk appetite of the issuer – which may change over time. We therefore complement our static cash flow analysis with forward-looking views on the potential evolution of risk factors.

February 2015 10 / 17



Modelling refinancing risk

Traditional covered bonds have bullet or "soft bullet" repayment structures, reflecting investor preference. But because cover assets, in particular mortgage assets, gradually amortise over time, liquidity shortfalls become likely when such cash proceeds become the sole source of repayment.

While we acknowledge that recovery from the cover pool is becoming the least likely scenario for a covered bond, given the relative rating distance between the issuer's ICSR and the covered bond ratings, low probability but high impact scenarios also have to be taken into account. The assessment of repayment risk therefore is important for covered bond ratings, as this is the highest risk covered bonds are potentially exposed to. We believe that the impact of curing mismatches need not be given as much importance in a post-resolution framework covered bond analysis, however.

We identify several ways of addressing refinancing risk (see Appendix), but except for a switch to a securitisation-like "pass-through" amortisation profile, in most cases refinancing and liquidity risks can only be mitigated, not eliminated. Our assessment of the extent to which refinancing risk impacts the ratings we assign to covered bonds reflects how actively issuers are working to mitigate this risk and what the likely volatility of changes is. We therefore take the issuer's refinancing strategies into account, including common maturities and issuance size.

Reflection of systemic relevance in the analysis

Analysing the systemic importance of covered bonds in combination with the legal framework analysis allows us to assess the impact of curing such mismatches on the expected loss of a covered bond.

We observe that in countries where covered bond funding plays an important role in the financial system, the covered bond structures often have the ability not only to sell assets but also to mitigate shortfalls by entering into bridge financing. Furthermore, we believe that in the event that parts of a cover pool need to be monetised, the proceeds from asset sales will be higher in countries with a well-established covered bond market than in countries where covered bonds are only used on an opportunistic basis.

In countries where covered bonds have high systemic importance, we expect the most likely buyers of cover pool assets to be market stakeholders with a major interest in the continued functioning of the covered bond market. In particular, other covered bond issuers are in our view the most likely to purchase such assets with a view to refinancing them with new covered bond issues. The liquidity premium we use for discounting cash flows therefore reflect the stressed spreads specific to the issuer's country and covered bond type.

In countries where covered bonds are only used on an opportunistic basis, we base our assessments rather on securitisation spreads, as potential buyers would want the purchase price to reflect the opportunity costs of having to securitise the assets.

Furthermore, refinancing assets present in "traditional" covered bond types such as mortgage and public sector covered bonds are in our view likely to be less sensitive to market disruptions than more bespoke covered bond types, including ship, aircraft and SME-backed covered bonds – even though they are issued in the same country.

Modelling the sale of cover assets

If a covered bond structure already prescribes a specific mechanism for selling cover assets (such as the Selected Asset Required Amount – SARA clause – or Supplemental Liquidity Reserve Accounts – SLRA), our modelling takes that into account as documented. Alternatively and if this option is available, we factor the impact of the refinancing of shortfalls and the use of asset amortisation to repay a liquidity line, which normally requires less additional protection than a firesale. If we model an asset sale, we forecast the cash shortfalls that occur within a predefined period (usually 12 months). We then model a stressed sale whose proceeds will ensure uninterrupted payment on the covered bonds. This reflects our view that for efficiency reasons a

February 2015 11 / 17

⁷ Covered bond issuance out of existing programmes often does not require long lead time, in particular if the bonds are not intended to be sold to the market but are rather used for collateralised lending with a central bank. Therefore, existing mismatch profiles can change significantly and swiftly in particular in times of distress. During the recent credit crises we have observed massive issuance volumes of covered bonds that were retained and used for such purposes.

designated cover pool manager would rather perform one asset sale per year than sell cover pool assets on an as-needed basis.

In our cash flow analysis, we model stressed assumptions for key parameters (including asset defaults, prepayments, interest and foreign exchange rate) that could lead to changes in scheduled cash flows. If the simulation indicates that the sum of accrued and simulated additional cash inflows is not sufficient to pay interest or repay a maturing covered bond, we determine the remaining present value by discounting expected stressed cash flows. Our discount rates reflect the relevant market rates plus liquidity premiums⁸ that are conditional on the rating uplift, while taking into account the specific composition of the cover pool.

We typically use observed secondary market spreads from trading indices in the relevant covered bond or securitisation markets. If appropriate, we also take into account other reference points such as spreads for sovereign or sub-sovereign bonds, credit default swap premiums and other observed trading prices for similar asset types. We may further adjust such observations to take into account asset, jurisdiction or structure specific factors that are not included in the relevant observations.

Availability of overcollateralisation

One of the most important factors in covered bond analysis is the amount of benefit from the level of overcollateralisation provided to support the rating. Overcollateralisation is the variable actively managed by issuers to support and maintain covered bond ratings over and above the bank ICSR. An issuer's ability and willingness to provide such funding is essential and needs to be reflected in the rating analysis.

The higher the level of overcollateralisation, the more protected covered bond investors are in an insolvency scenario, which is why issuers generally provide levels over and above the legal minimums. We believe that highly rated issuers that regularly tap capital markets with new covered bond issuances have a strong incentive to maintain a predictable overcollateralisation management. As all covered bonds rank pari passu between each other, not only is adverse management relevant for new issuances; it also has repercussions for investors holding covered bonds of the same type.

Our methodology aims to avoid rating volatility caused by the issuer's adversely managing the currently available overcollateralisation. We expect that absent contractual commitments, an issuer is more likely to negatively exercise its management discretion to provide an adequate level of overcollateralisation the lower its ICSR falls. Capital market funding might no longer be economically feasible for the issuer, which would turn instead to collateralised central bank funding. Maintenance of minimum thresholds to allow for ongoing central bank access using covered bonds might consequently make more sense than supporting existing ratings as a possible means to facilitate direct capital market access.

Our analysis generally considers the currently available overcollateralisation if the issuer has an ICSR of at least BBB. ⁹ If the rating is below BBB, our decision to take into account the currently available overcollateralisation depends on whether the issuer engages in sufficiently robust capital market communication on overcollateralisation levels in line with expectations. ¹⁰ We will adjust the level of overcollateralisation downward when there are no such statements. The adjustment will reflect the past observed volatility and our forward-looking view on the overcollateralisation levels expected. Furthermore, we only take into account the legal minimum for issuers rated in the BB category and below if there are no public contractual commitments.

Counterparty risk

Both in the pre- and post-insolvency phase for the issuer, timely and full payment on the covered bonds as well as the ongoing provision of services may also depend on the continued performance of services by counterparties other than the issuer. For the covered bond rating, we therefore determine whether in our view obligations that can impact the performance and creditworthiness of covered bonds continue to be met or

February 2015 12 / 17

 $^{^{8}}$ We typically rebase the liquidity premium annually.

⁹ If we were to observe high overcollateralisation volatility close to the level needed to support the current rating and if no guidance were provided by the issuer, our covered bond rating would likely use a stressed low-point overcollateralisation based on prior-year overcollateralisation trends.

overcollateralisation trends.

10 We would generally expect capital market communication to become more assertive and to include dynamic elements the lower the ICSR falls, and to describe a predefined withdrawal process and a minimum period before the issuer may reduce the overcollateralisation.

whether we need to reflect the potential risk by incorporating the risk of non-performance into our covered bond rating. We normally assume that services can be provided with a high degree of certainty if structured finance techniques that use replacement or other risk-mitigating mechanisms for key agents are implemented. This is likely to allow us to delink the covered bond structure from the credit risk of these agents. Alternatively, we factor a credit link to the credit risk of this specific party. We may also have to quantify identified risks in the level of overcollateralisation required to support the current rating. The extent to which counterparty risk can impact the final covered bond rating needs to be considered in connection with credit differentiation the cover pool analysis is able to provide.

We also observe that certain derivatives used to mitigate market risks in covered bonds can be bespoke. Furthermore, covered bond programmes might rely to a significant degree on the ongoing performance of one large counterparty exposure, which might belong to the same financial group as the covered bond issuer. In our view, both of these factors could impact the benefit they provided to the covered bond rating. In these cases the rating analysis provides a sensitivity analysis to identify the potential rating volatility.

Sovereign risk

As in its ratings of financial institutions and structured finance issuances, Scope does not mechanistically limit the maximum rating achievable by a covered bond according to the sovereign rating for the issuer's country or the origination of the cover pool. While macroeconomic factors play an important role in Scope's rating analysis, the agency believes that the credit quality of a sovereign is not a suitable basis for imposing a rating cap, particularly in Eurozone countries, as it does not allow for an adequate relative ranking of covered bonds' credit quality.

In our bank rating analysis, we assess on a bank-by-bank basis the extent to which changes in the relevant sovereign's credit fundamentals are likely to impact the individual issuer's performance and credit quality. Issuer-specific business models and risk profiles result in a differentiated assessment of sovereign risk for the bank rating.

In our covered bond analysis, we also analyse these risks on a case-by-case basis. In particular, we ensure that Scope's view on the credit fundamentals of the relevant home sovereign¹¹ remains adequately reflected in the stresses that support covered bond ratings. The weight given to this factor may differ in both the covered bond and the bank analysis, as the cover pool composition and risk profile are likely to exhibit different risk characteristics than the rest of the balance sheet. The cover pool may also differ from the overall bank funding risk profile in terms of asset-liability mismatch.

Sovereign considerations will consequently not be of uniform significance among issuers and in our analysis of different cover pools. The relative significance of such considerations also may vary among issuers to the extent that the composition of cover pools varies. Different cover pools exhibit different sensitivities to our sovereign considerations.

Sensitivity analysis

In order to supplement the quantitative approach described above, Scope also performs sensitivity analysis to identify the most significant variables driving the credit performance of the collateral pool. We also test which assumptions on these variables would cause a higher expected loss leading to a rating change. Another common key test Scope may apply consists of testing the covered bond structure as if it were supported only by the statutory overcollateralisation.

Transparency on risk drivers

To enable investors to identify potential rating drivers early on and to facilitate comparability between different covered bond programmes, we will regularly provide additional information on the risk factors in each building block of the analysis.

February 2015 13 / 17

¹¹ We take into consideration the economic environment of the country to which the majority of cover assets are sensitive. In general we expect this to be the country the issuer is located in.



Appendix I. Rating symbols and definitions

Long-term rating scale and definitions

There are 20 long-term rating levels for covered bonds; they are given on a scale from AAA to D. The AAA, AA, A and BBB ratings are considered investment grade; the BB, B, CCC, CC C and D ratings are considered non-investment grade. The AA to B ratings are broken down further with "+" and "-" suffixes. The following table gives the definition for each rating.

AAA	Ratings at the AAA level reflect an opinion of the strongest credit quality.
AA	Ratings at the AA level reflect an opinion of strong credit quality.
А	Ratings at the A level reflect an opinion of good credit quality.
BBB	Ratings at the BBB level reflect an opinion of moderate credit quality.
ВВ	Ratings at the BB level reflect an opinion of modest credit quality.
В	Ratings at the B level reflect an opinion of very modest credit quality.
CCC	Ratings at the CCC level reflect an opinion of poor credit quality.
CC	Ratings at the CC level reflect an opinion of very poor credit quality.
С	Ratings at the C level reflect an opinion of extremely poor credit quality.
D	Ratings at the D level refer to a default situation.

Scope's credit ratings for covered bonds constitute a forward-looking opinion on the bonds' relative credit risk. The rating reflects the expected loss associated with the contractually-agreed payments on a particular due date or by the bond's maturity date. The ratings therefore factor in both the likelihood of a default on such payments and the loss severity expected upon default.

A covered bond default event includes any of the following:

- i) a missed payment of interest or principal when due and incurred under the terms and conditions of the bond, after any grace period applicable under the transaction documents;
- ii) a restructuring or repurchase of some outstanding covered bonds with the aim of avoiding a payment failure, which ultimately leads to an economic loss for the debt investor;
- iii) an Event of Default (EoD) under the terms of the bond or the legal framework leading to an acceleration of the covered bonds and a claim on the cover pool.

Short-term rating scale and definitions

Scope does not necessarily apply a strict formulaic relationship between long- and short-term ratings, even though a strong correlation generally does exist between the two. We use a short-term rating scale to rate bonds with an initial maturity of 13 months or less. Short-term ratings are given on a five-point scale ranging from S-1+ to S-4. The following table gives the definition of each short-term rating.

S-1+	Ratings at the S-1+ level reflect an opinion of the highest capacity to repay short-term obligations with the lowest credit risk on a short-term basis.
S-1	Ratings at the S-1 level reflect an opinion of high capacity to repay short-term obligations with very low credit risk on a short-term basis.
S-2	Ratings at the S-2 level reflect an opinion of good capacity to repay short-term obligations with low credit risk on a short-term basis.
S-3	Ratings at the S-3 level reflect an opinion of fair capacity to repay short-term obligations with acceptable credit risk on a short-term basis.
S-4	Ratings at the S-4 level reflect an opinion of low capacity to repay short-term obligations, with high credit risk on a short-term basis.

Covered bond rating outlook

As we do with bank ratings, we accompany each covered bond rating with a rating outlook, which can be stable, positive or negative. The positive and negative outlooks usually refer to a time period of 12–18 months.

February 2015 14 / 17



The issuer provides the first recourse for a covered bond, which means that the outlook for the issuer's overall rating will likely have a strong correlation with the outlook for the issuer's covered bond rating. However, both outlooks might not move in tandem. Because issuers have the discretion to manage a covered bond's risk structure, they could counter downward pressure on their ICSR. Therefore, a bank's rating could have a negative outlook while its covered bond rating has a stable outlook, and vice versa. Since that issuer discretion can work both ways, an increase in the risk on or a reduction in the protection available for an issuer's covered bonds may also prompt us to assign a different – e.g., negative – outlook to its covered bonds while the issuer's own outlook remains stable.

Outlooks do not necessarily signal that a rating upgrade or downgrade will automatically follow, although such an outcome is more likely than not.

Rating reviews and changes

Once we assign a covered bond rating, we continue to monitor it unless we no longer receive sufficient information to keep it up-to-date. For seasoned covered bond programmes, we expect to receive key asset and cash flow data at least on a quarterly basis and we perform a full review of the covered bond rating at least once a year. For less seasoned programmes or programmes where significant changes have occurred, we may request additional data in-between reporting cycles to keep the rating up-to-date.

A change in an issuer's ICSR or a placement of its ICSR "under review" will likely prompt a corresponding review of its covered bond ratings — unless the cover pool provides a sufficient buffer for a potential downgrade. Similarly, if we were to observe a sudden change in the credit fundamentals for a covered bond, our first step would most often be to place the rating "under review". Such sudden changes could result from the issuer adversely managing its overcollateralisation, exercising its discretion over the assets in the cover pool to a larger extent than expected, idiosyncratic risks specific to certain assets in the cover pool becoming visible, or other rating-relevant factors that have been identified in our analysis as warranting further clarification.

Rating reviews are carried out for possible upgrades or downgrades, and very rarely have a developing outcome (only in instances of heightened uncertainty about a specific credit event).

Withdrawal of covered bond ratings

Scope may decide to withdraw assigned covered bond ratings. This can be for the following reasons:

- The underlying debt instrument has matured.
- There is insufficient information available to Scope to maintain the credit analysis underpinning the rating.
- The issuer requests a rating withdrawal.
- The withdrawal is based on a business decision by Scope.

Should an issuer ask Scope to withdraw its ratings, Scope may decide not to do so despite the issuer's request if it considers that ceasing to rate the issuer or debt could create potential disruptions to the bond market.

Except for the withdrawal of a rating on matured debt instruments, all other rating withdrawals require a rating committee decision. Rating withdrawals take place at the rating that Scope considers accurate at the time of the withdrawal. A withdrawal may therefore be preceded by a rating upgrade, downgrade or affirmation.

Specific rating qualifiers

Certain rating-specific situations are indicated by a suffix on the rating as follows:

P denotes a preliminary rating

Related documents

The following related documents are available on the Scope website:

- Scope Code of Conduct
- Conflict of Interest Inventory
- Transparency Report

February 2015 15 / 17



Appendix II. Liquidity risk mitigation mechanisms

We currently observe that issuers apply a variety of mitigation measures that for the most part do not entirely eliminate, but rather mitigate, a covered bond's refinancing risk.

Conditional pass-through structures

Covered bonds are repaid as a bullet payment on the scheduled due date under a going concern, and potentially also under a gone concern assumption. Such covered bond structures employ tests that aim to avoid an event of default, thereby making payment on the scheduled due date conditional. If servicing the amounts due is no longer possible as per the schedule, the repayment method would switch to pass-through. In this case, the cover pool's available proceeds will be allocated pro rata to the outstanding covered bonds according to a predefined waterfall, and instead of being paid on the scheduled due date, investors will receive interest and principal up to the final maturity date. As typical for securitisations, the final maturity date will be determined by taking into account the longest-dated assets; it will also include a work-out period so that if the repayment depends on repayment of the last asset, even a default and subsequent work-out would not threaten the ultimate repayment of principal.

Depending on the structural setup of such a covered bond – and in particular how a material change in risk factors are addressed to ensure going concern status – the covered bond could be rated on a delinked basis. However, we expect continued dependency on the sponsor, and thus a certain degree of linkage to persist.

Soft bullet structures and other mitigation measures

Traditionally, soft bullet structures allow for an extension period (usually 12 months) for the hard bullet payments. The aim is to reduce the likelihood of a covered bond event of default. The extension period is intended to allow the cover pool manager to either accrue additional repayments during the extension, or more efficiently monetise cover assets to meet the payment on the extended final due date.

We will review the presented structures and incorporate in the quantitative modelling the extent to which the structures mitigate the repayment risk in our view.

Pre-maturity tests require issuers only to prefund the redemptions coming due in a given period (also usually 12 months). Highly-rated issuers often do provide conditionality as well, since they will only have to fund the corresponding reserve if they fail to meet rating thresholds similar to those applied for liquidity lines.

Similarly, some covered bond laws require tests similar to the pre-maturity test to cover the cumulative outflow for a predefined period, typically six months. The outflow would have to be buffered by readily-available liquid assets that could cover any identified shortfall.

The weakest mitigation measure in our view is the sole ability to register liquid assets, but where the amount needed is not further specified or where we only observe active liquidity management.

February 2015 16 / 17



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