COVERED BOND RATING METHODOLOGY

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1. ABOUT THIS METHODOLOGY

Scope

This methodology presents the broad principles and assumptions that Capital Intelligence Ratings (hereinafter CI Ratings or CI) uses when rating covered bonds. This methodology establishes criteria for assigning Covered Bonds Ratings (CBRs), which are a new addition to the rating services offered by CI.

The criteria apply to the first-time rating of covered bonds, as well as to the surveillance of existing ratings. In addition to this master methodology, CI will publish country-specific rating stress assumptions and, where appropriate, criteria addendums relevant to the issuers and issues that CI rates.

This methodology should be read in conjunction with CIs Bank Rating Methodology.

Effective Date and Impact on Existing Ratings

This methodology is effective immediately and will apply to all new CBRs. CBRs are a new asset-class specific addition to CIs rating services. Consequently, no current ratings are affected by the introduction of this methodology.

Structure of this Methodology Report

The remainder of this document is organised as follows:

- Section 2 contains a summary of CIs analytical approach to determining CBRs.
- In Section 3 we explain the rationale for each of the three analytical pillars for CBRs and provide a detailed description of our assessment criteria for each key rating factor.
- In Section 4 we identify the main factors that are considered outside of the three analytical pillars but may have an important influence on the final CBR assigned.
- Annex 1 contains examples of our approach to rating uplifts.
- Annex 2 contains the rating scale and associated definitions applicable to CBRs.
- Annex 3 contains a glossary of selected terms.

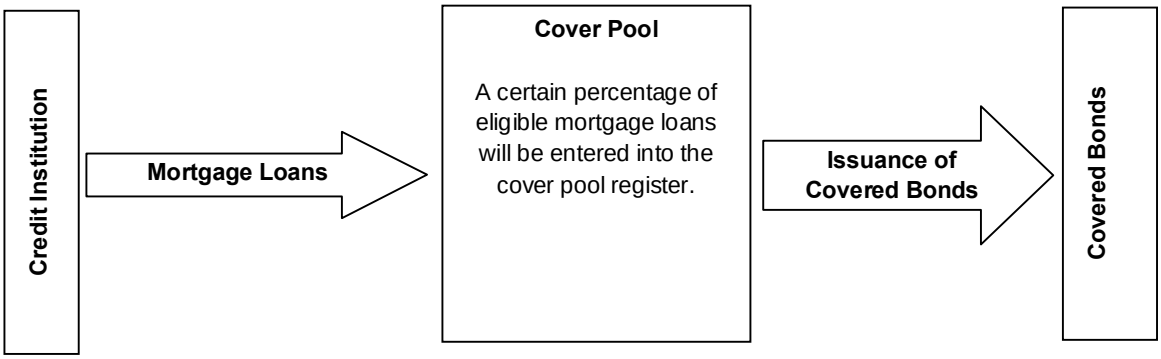
2. SUMMARY OF OUR ANALYTICAL APPROACH

2.1 Overview and Framework

The Covered Bond Rating (CBR) is the main rating that CI assigns to covered bonds issued globally. CBRs primarily reflect default risk ï namely the likelihood of the obligor or issuer being unable or unwilling to meet its financial obligations in a timely manner ï but also take general account of the repayment priority of the rated instrument in the event of liquidation, as well as the likelihood of full recovery of principal.

Covered bonds are interest-bearing debt instruments secured by a cover pool of loans (mortgage, ship, SME or aircraft) or public-sector debt. They are issued by credit institutions (typically banks), which in some jurisdictions require a licence for the issuance of covered bonds. The general structure of a mortgage covered bond is illustrated in Box 1 below and described below.

BOX 1: STRUCTURE OF TYPICAL MORTGAGE COVERED BOND



A credit institution originates mortgage loans, which are reported on its balance sheet. The cover pool monitor assesses whether these loans, or part of them, are eligible as cover pool assets and will register eligible loans (including the collateral securing them) in the cover pool register. Separate cover pool registers are generally maintained for different asset types (e.g. mortgage loans, ship loans, aircraft loans). Based on the value of the cover pool register, covered bonds will be issued by the credit institution.

For as long as the credit institution (issuer) is solvent, it will pay interest and principal due on the covered bonds and actively manage the cover pool. However, in the event of the issuerôs insolvency the cover pool may become the sole source of cash inflows for covered bond investors. Consequently, covered bond investors not only have a claim against the issuer, but also a preferential claim against the cover pool in the event of the issuerôs bankruptcy (so-called ódual-recourseô).

CBRs thus reflect the credit standing of the issuer and the risks (credit, market, liquidity) inherent in the cover pool and covered bonds. Unlike many other types of debt instrument, the default risk of covered bonds may by significantly lower than the risk of the issuing bank becoming insolvent or defaulting on senior unsecured obligations. As a result, covered bonds may achieve ratings that are many notches higher than the credit institutionôs long-term issuer credit rating (ICR). The extent of such a rating differential hinges crucially ï though not exclusively ï on the strength of the Legal and Regulatory Framework (LRF) and, in particular, on the effectiveness of arrangements for ensuring that the covered bond programme continues to fulfil its payment obligations even after the issuer has defaulted on senior unsecured debt, entered resolution, or been liquidated under normal insolvency

proceedings. Consequently, when assigning CBRs we consider the strength of legal provisions to ensure the bankruptcy remoteness of the cover pool, as well as measures and standards to safeguard the quality and value of cover pool assets and ensure the effective administration of the covered bond programme.

We also assess whether ï in a hypothetical post-insolvency scenario ï cash inflows from the cover pool assets would be sufficient to meet payments due on the covered bonds under a range of credit and cash flow stress scenarios. Additional analytical considerations include counterparty risk and sovereign risk, as well as structural enhancements which may mitigate weaknesses in the LRF and reduce counterparty and sovereign risk.

2.2 Summary Covered Bond Analytical Process

Our process for determining CBRs consists of four main steps:

Step 1 – Issuer Credit Strength

We first form an opinion of the issuerôs general creditworthiness ï summarised in a Long-Term Issuer Credit Rating (ICR) ï and use this to establish a floor for the CBR.

Step 2 – Legal and Regulatory Framework

We then analyse the LRF, focusing in particular on the effectiveness of arrangements for ensuring that the covered bond programme continues to fulfil its payment obligations even after the issuer has defaulted on senior unsecured debt, entered resolution, or been liquidated.

The assessment of the LRF focuses on the covered bond legislation. Structural enhancements underpinned by stipulations in the transaction documentation and which help mitigate potential weaknesses in the legal framework for covered bonds are considered separately as part of Step 4, ôOther Rating Considerationsô. We make this distinction in countries with covered bond-specific LRFs for analytical and presentational reasons. In particular it ensures that the individual components of rating uplifts can be attributed to their underlying source ï be it covered bond legislation or the transaction documentation.

Depending on the strength of both the LRF (Step 2) and contractual enhancements in the bond documentation (Step 4), we may rate a covered bond up to six notches higher than the issuing bankôs ICR (all other things being equal). While structural enhancements may partially or fully offset deficiencies in the LRF, the maximum rating uplift that could be achieved from the combination of a strong LRF and enhancements over and above statutory minima would still be six notches.

Step 3 – Cover Pool Adequacy

Next, we assess the adequacy of the cover pool as a source for timely payment of interest and principal on the covered bonds, under the assumption that the issuer has become insolvent. We perform cash flow analysis and apply various rating scenario stresses in order to establish whether the rating could potentially be uplifted beyond the level indicated by the LRF ï generally by up to three additional notches ï or whether it should be reduced by one or more notches (partially or fully offsetting the uplift due to the LRF).

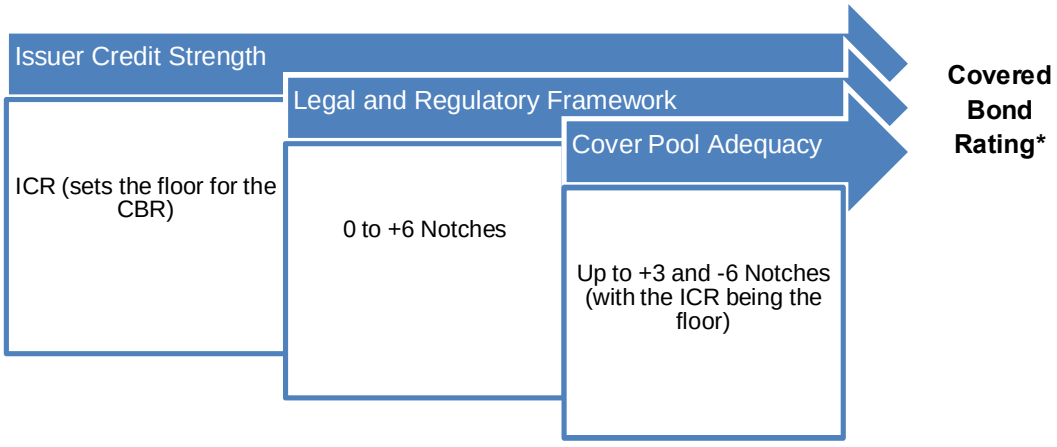
Step 4 – Other Rating Considerations

The final CBR is derived by combining the individual outcomes of Steps 1 to 3 and by factoring in other risk drivers ï notably counterparty risk and sovereign risk ï as well as any structural enhancements to mitigate such risks (see Section 4).

Given the notching guidance indicated in Steps 2 and 3, the maximum gap between a CBR and ICR will generally be restricted to nine notches, unless a higher rating is warranted by particularly strong idiosyncratic or mitigating factors.

Our approach to rating uplifts and reductions is illustrated in Box 2. Simplified examples of this approach are shown in Annex 1.

BOX 2: ANALYTICAL PILLARS AND NOTCHING



*Subject to consideration of counterparty and sovereign risk, as well as structural enhancements

2.3 Analytical Pillars and Key Rating Factors

The analytical pillars and key rating factors used for determining CBRs are summarised in Box 3.

Details of the analytical pillars are outlined below.

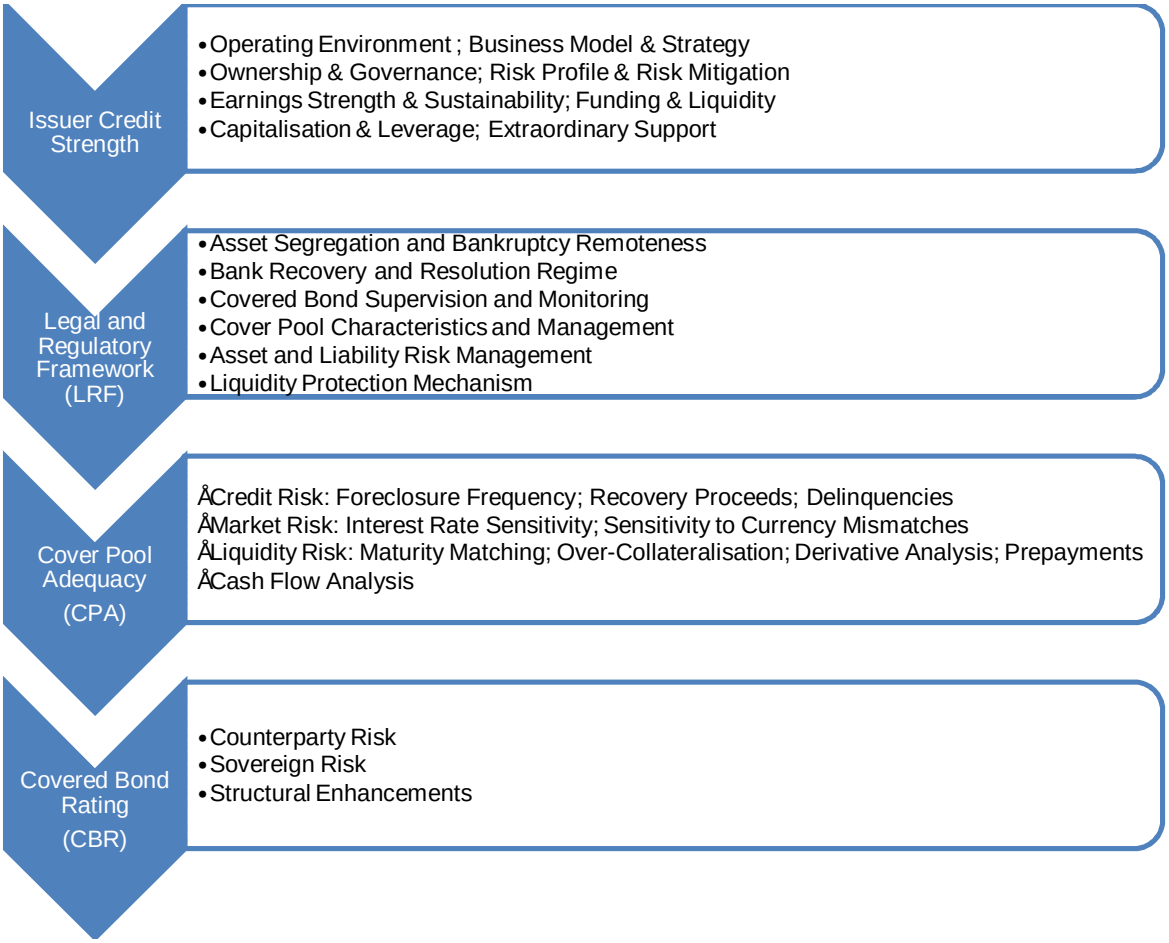
Pillar 1: Issuer Credit Strength

The credit standing of the issuer of the covered bonds is the starting point for determining CBRs and is measured by the long-term ICR.

Covered bond investors have full recourse to the credit institution issuing covered bonds. The issuer has an ongoing obligation to maintain sufficient assets in the cover pool and to pay interest and principal due on the covered bonds. For as long as the issuer is solvent, it can at its discretion (subject to regulatory, legal and contractual obligations) decide about the composition of the cover pool in terms of asset mix and asset quality, the amount of over-collateralisation, and the management of asset and liability mismatches, as well as interest rate and currency mismatches.

Due to this direct link to the issuer, the CBR is generally not lower than the ICR. The preferential claim against the cover pool in combination with bankruptcy remoteness and other structural features of the covered bond may, however, allow for a higher rating.

BOX 3: ANALYTICAL PILLARS AND KEY RATING FACTORS FOR COVERED BOND RATINGS



Pillar 2: Legal and Regulatory Framework

In the event of the insolvency or resolution of the issuer, covered bond investors have to rely on the proceeds derived from the cover pool assets as the sole source for the timely payment of interest and principal due on the covered bonds. Cover pool assets, including derivatives protecting the cover pool and/or the covered bonds from adverse interest, currency or other risks, therefore need to be easily identifiable and effectively segregated from non-cover pool assets. In addition, the covered bonds need to be bankruptcy remote and not subject to automatic payment acceleration.

The likelihood of the covered bonds continuing to be serviced may also be affected by a countryôs resolution regime. CBRs may benefit if the regime incentivises regulators to restructure struggling issuers rather than resort to normal insolvency proceedings and if covered bonds are excluded from the liabilities that the authorities may ôbail-inô in resolution.

The strength of a countryôs LRF is also defined by the scope and frequency of disclosure requirements and the role and responsibilities of the cover pool monitor (pre issuer insolvency) and the special administrator (post issuer insolvency).

The ability of cover pool assets to pay interest and principal depends on the consistency and stability of the cover pool composition, which is generally ensured by maximum loan-to-value (LTV) limits, the regular revaluation of cover pool assets, and transparent valuation rules.

Different maturity profiles for cover pool assets and covered bonds, as well as currency and interest rate mismatches, prepayments of cover pool assets, and the overall credit risk embedded in cover pool assets require ongoing asset and liability risk management (ALM) by the issuer, or by the special administrator in the event of issuer insolvency. For ALM to be effective, the LRF should require, inter alia, a minimum amount of over-collateralisation, that derivative contracts may not be terminated upon the insolvency of the issuer, that all liabilities of a covered bond programme are covered at all times by cover pool assets (known as the coverage principle), and eligibility criteria for substitute assets.

In the event of issuer insolvency, liquidity protection mechanisms (or liquidity buffer requirements) are also necessary to ensure the smooth transition from the issuer to cover pool assets as the source of covered bond payments.

In light of the above, we establish the strength of the LRF by assessing the following six areas:

- Asset Segregation and Bankruptcy Remoteness
- Bank Recovery and Resolution Regime
- Covered Bond Supervision and Monitoring
- Cover Pool Characteristics and Management
- Asset and Liability Risk Management
- Liquidity Protection Mechanism

The stronger the LRF, the lower the likelihood of covered bond holders experiencing delays in payments of interest or principal, or losses due to lower recovery proceeds.

The analysis and ongoing monitoring of the LRF includes the review and assessment of the relevant covered bond legislation, as well as of the legal environment in the jurisdiction in which the covered bonds will be issued. Our assessment will generally consider aspects of the LRF before and after an issuer's insolvency.

In jurisdictions where no dedicated covered bond legislation exists, we will focus on the extent to which contractual arrangements provide for the same investor protections and credit enhancements as covered bond-specific LRFs in each of the six areas identified above.

The programme-specific credit, market and liquidity risks embedded in a covered bond and in the underlying cover pool are not considered during the LFR analysis, but as part of our assessment of cover pool adequacy (CPA).

Pillar 3: Cover Pool Adequacy

CI's CPA assessment includes a detailed analysis of the credit, market and liquidity risk characteristics of the cover pool, as well as of the covered bonds, and the resulting implications for cash flows.

Cash inflows from the cover pool may be reduced by delinquent loans or by adverse interest rate or currency movements (in case of unhedged cover pool assets). Defaulted and foreclosed cover pool assets may further result in reduced recoveries, depending on the percentage of cover pool assets that default and the severity of losses.

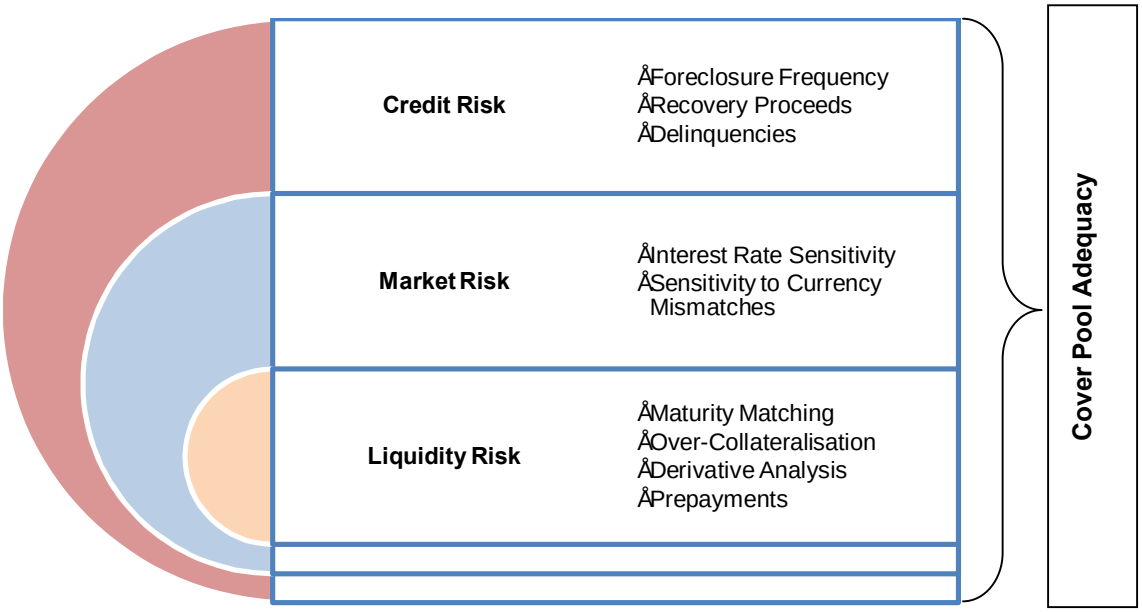
Cash outflows required to pay interest and principal on the covered bonds may increase due to adverse interest rate or currency movements (in the case of unhedged exposures), and cash shortfalls can occur if the maturity profile of the cover pool assets deviates significantly from that of the covered bonds.

Most of the risks associated with covered bonds can be mitigated by over-collateralisation, making it the principal form of credit enhancement for covered bond investors and one of the key rating drivers in CIÕs analysis. Over-collateralisation is defined as the amount of cover pool assets exceeding the amount of covered bonds outstanding. These additional cover pool assets can offset cash shortfalls arising from defaulted or delinquent loans, for example, and can counterbalance maturity mismatches.

Other mitigating factors include natural maturity and currency hedging and derivative contracts.

The broad key rating factors and sub-factors that we focus on when assessing CPA are shown in Box 4.

BOX 4: KEY DRIVERS OF COVER POOL ADEQUACY



We analyse credit, market and liquidity risks and feed the underlying drivers into our covered bond cash flow analysis. Our cash flow analysis reveals which rating stresses the covered bond programme is able to withstand and therefore is a key determinant of the final CBR.

CI will establish country, currency and interest rate-specific assumptions to assess CPA. These will be published in separate reports.

CPA rating differentiation matrix and the determination of uplifts

To ensure rating stability and differentiate between covered bonds with unique risk profiles, as well as to take into account the willingness and capacity of issuers to maintain high quality cover pools, we have established a rating differentiation matrix for the determination of uplifts (in notches) resulting from the CPA.

The rationale behind the rating differentiation matrix is that cover pools which contribute more significantly to higher CBRs (in uplift notches) should be able to pass more severe stresses than cover pools which contribute less significantly to higher CBRs. óAAAô rating stress scenarios therefore incorporate the highest stress levels while óBôrating stress scenarios encompass only basic stress levels.

This ensures a differentiation between cover pools with a strong credit profile and cover pools with a weak credit profile for issuers with the same ICR. The first may increase the difference between ICR and CBR by up to three notches (in addition to the uplifts due to the LRF analysis) while the latter may effectively decrease the difference between ICR and CBR by up to six notches, with the ICR being the floor.

The rating differentiation matrix further allows for higher rating uplifts (in notches) for higher rated issuers than for lower rated issuers with similar cover pool credit profiles. This reflects the greater willingness and capacity of higher rated issuers, in our view, to maintain the credit profile of the cover pool. Cover pools which pass óAAAôrating stress scenarios can hence achieve an uplift of up to three notches for highly rated issuers and only up to one notch for lower rated issuers.

If the cover pool can only pass rating stress scenarios at two notches below the ICR, CI may decide to rate the covered bond no higher than the ICR.

Potential deviations from the general CBR framework

CI may, in certain circumstances, deviate from the general framework for rating covered bonds and de-link the CBR from the ICR to a greater extent than the nine-notch uplift described above. Possible scenarios where such a deviation is more likely to occur include the resolution of a covered bond issuer in a jurisdiction where covered bonds are exempt from bail-in, and the trigger of a conditional pass-through structure.

For example, we would not necessarily restrict the CBR to a maximum of nine-notches above the ICR in cases where, as part of the issuerôs resolution, outstanding covered bonds and cover assets are transferred ï without any disruption to payments ï to an independent servicer. In such a case the ICR of the issuing bank is likely to be very low (óCôrange or default grade), but we may set the CBR at a grade more commensurate with the level of the CPA rating stresses passed by the transaction ï which may be 10 or more notches above the ICR of the issuing bank. This is because, following the transfer, the default risk of the covered bonds is greatly removed from the creditworthiness of the issuer and, consequently, the CBR is more driven by the credit quality of the cover pool.

2.4 Rating Scale and Definitions

The scale for CBRs and the associated rating definitions are given in Annex 2. Outlooks are also assigned to CBRs to indicate the likely direction of a change in the ratings over the next 12 months. A Positive (Negative) outlook signals a better than even chance that the rating will be raised (lowered) within a year. A Stable outlook indicates that the rating is unlikely to change in the next 12 months.

3. COVERED BOND RATINGS: ANALYTICAL PILLARS

In this section we explain the rationale for each of the three analytical pillars for CBRs and outline the criteria used to assess the underlying key rating factors. The analytical pillars are:

1. Issuer Credit Strength
2. Legal and Regulatory Framework
3. Cover Pool Adequacy

ANALYTICAL PILLAR 1

ISSUER CREDIT STRENGTH

A detailed assessment of the overall creditworthiness of the issuer is a critical component of CIs covered bond analysis.[1] This is necessitated by the dual recourse nature of covered bonds. While the issuer is solvent, covered bonds are paid according to their original terms and conditions from the credit institution's general cashflows. It is only when the issuer becomes insolvent that investors have recourse to a dedicated pool of collateral to cover any shortfall in payments due on the covered bonds.

Dual-recourse makes covered bonds more resilient to, but does not fully isolate the bonds from, the failure or default of the issuer. As on-balance sheet instruments, covered bonds remain exposed to active management by the issuer in terms of underwriting standards, management of over-collateralization levels, ALM decisions and so on, albeit within the scope of legal and regulatory requirements.

CIs opinion of the overall creditworthiness of rated entities is summarised in the ICR, which indicates in particular the general likelihood of default on senior financial obligations. Consequently, the long-term ICR of the issuing bank represents the starting point for CIs rating analysis of covered bonds and sets a floor for the CBR.

When we assign ICRs, we consider a banks standalone credit profile and the likelihood of it receiving extraordinary external support from owners or the government, should such assistance be required in order to avoid default. Our assessment of standalone strength takes into account a number of key credit fundamentals, including the operating environment, the banks business model and strategy, ownership and governance, risk profile, earnings strength, funding and liquidity, and capital adequacy.

[1] As part of the analysis of covered bonds, CI will assign a public or private issuer credit rating to the issuing entity.

ANALYTICAL PILLAR 2

LEGAL AND REGULATORY FRAMEWORK

LRF analysis is the starting point for establishing whether the CBR may exceed the ICR. A higher rating is possible due to the dual recourse nature of covered bonds, particularly the credit enhancement derived from the ability of investors to make claims for payment of interest and principal against the cover pool in the event of an issuer default or insolvency.

The extent to which the credit risk of a covered bond may be decoupled from the default risk of the issuer depends to a large degree on the strength of the LRF. Dual recourse and the dynamic nature of cover pools (with issuers generally being able to adjust the composition of the pool) typically mean that this decoupling will not be complete, however. CI Ratings therefore uses the ICR as the starting point for notching and generally limits the extent of any uplift in the CBR attributable to the LRF to a maximum of six notches (i.e. two rating categories).

The European covered bond market has a long history of no defaults and investors have not suffered losses, even during financial crises. The legislation for traditional covered bond markets in countries such as Germany, Austria, Switzerland and Denmark has therefore served as a template for other covered bond markets in Europe and globally. However, while this stable historical performance constitutes a positive track record, several European covered bond issuers have required external support (bail outs) in the past decade. The risk of a covered bond issuer failing is, therefore, not negligible ï hence the importance of assessing the LRF.

In devising this methodology we considered, inter alia, the recommendations of the European Banking Authority (EBA) contained in the EBA Report on EU Covered Bond Frameworks and Capital Treatment, published in 2015, the European Commissionôs study on the harmonisation of legal frameworks and market behaviour for covered bonds, as well as papers published by the International Monetary Fund. In the case of non-European covered bond frameworks and non-regulated covered bonds, we expect the LRF and, in the latter case, the relevant contractual agreement, to meet the same key objectives and achieve similar goals as EU best practice.

Assessment Criteria

The LRF analysis considers and monitors all aspects of the legislative, legal and contractual environment for covered bonds in a given jurisdiction. While asset segregation, bankruptcy remoteness and no automatic payment acceleration are key features of any framework, rigorous supervision and frequent and comprehensive reporting/monitoring, as well as minimum over-collateralisation, liquidity reserve requirements, and the exclusion of covered bonds from bail-in regimes, amongst others, characterise strong covered bond frameworks.

In this section, we explain the rationale for each of the following six key rating factors and outline the criteria used to assess them. The key rating factors are:

(1) Asset Segregation and Bankruptcy Remoteness
(2) Bank Recovery and Resolution Regime
(3) Covered Bond Supervision and Monitoring
(4) Cover Pool Characteristics and Management
(5) Asset and Liability Risk Management
(6) Liquidity Protection Mechanism

If no covered bond legislation exists in a particular jurisdiction, CI will analyse the covered bond-specific legal documentation. The analytical considerations outlined below cover both cases.

KEY RATING FACTOR 1

Asset Segregation and Bankruptcy Remoteness

In the event of the issuer becoming insolvent, the cover pool may become the sole source of cash inflows to pay interest and principal due on the covered bonds. To continue performing, the covered bonds and cover pool must be segregated from the other assets and liabilities of the insolvent issuer and not become part of the bankruptcy estate. Moreover, insolvency should not trigger an acceleration of payments due on the covered bonds as this could greatly increase the likelihood of a default on the bonds.

The legal or contractual framework may differ for on-balance-sheet covered bonds and off-balance-sheet covered bonds. The analysis of on-balance-sheet covered bonds generally focuses on the terms of the legal and regulatory regime in a particular jurisdiction. The analysis of off-balance-sheet covered bonds takes into account contractual bi- or multi-lateral agreements and, in some jurisdictions, the regulatory framework as well as the analysis of the bankruptcy remoteness of any special purpose vehicles (SPV) established to issue the covered bonds.

We would generally expect the following to hold when considering the adequacy of asset segregation and bankruptcy remoteness:

- A cover asset register in which all cover assets are recorded is required and maintained and the segregation is legally valid and enforceable (for on-balance sheet covered bonds).
- The bankruptcy law treatment of covered bonds does not have an adverse impact on the ongoing ability to manage a covered bond programme during either a regulatory action or in the event of the issuerôs insolvency.
- Covered bond payments do not áaccelerateô if the issuer defaults on other debt obligations.

Other considerations include set-off risk, claw-back risk, and secondary insolvency proceedings abroad.

Our analysis will focus in particular on whether legal, regulatory or, in the absence of a covered bond-specific LRF, contractual requirements support the continuation of timely payments being made on the covered bonds in the event of the issuerôs bankruptcy by ensuring access to the underlying cover assets and associated cashflows.

In the absence of effective asset segregation and bankruptcy remoteness we may only be able to rate the covered bonds in line with our general approach for rating secured bonds.

KEY RATING FACTOR 2

Bank Recovery and Resolution Regime

Covered bond investors may also benefit from the issuerôs ability to adequately maintain the cover pool and continue managing credit, market and liquidity risks associated with the covered bond programme despite financial difficulties which require the intervention of regulators.

Bank recovery and resolution regimes that incentivise regulators to restructure struggling covered bond issuers and provide statutory provisions which avoid negative impacts on covered bonds are a positive rating factor. In particular CBRs are likely to benefit in jurisdictions where covered bonds are exempt from bail-in rules in the event of resolution, but similar protection is not afforded to senior unsecured debt, and where covered bond investorsô recourse to cover pool assets remains intact.

To assess the strength of a countryôs recovery and resolution regime we consider in particular whether:

- Covered bonds are protected under the resolution regime and are exempt from the scope of bail-in tools (reducing their default risk compared to senior unsecured debt).
- The rated covered bond complies with local covered bond requirements and hence statutory protections would be expected to apply to the covered bond programme in the event of the issuer's resolution.
- The issuer's business model, including its systemic importance as well as liability and capital structure, would allow regulators to use available resolution tools to restructure the issuer in order to maintain the covered bond programme as a going concern.

KEY RATING FACTOR 3

Covered Bond Supervision and Monitoring

Covered bonds need to be monitored and supervised, preferably by an independent party, to ensure that the ongoing management of cover pool assets and the covered bonds by either the issuer (pre insolvency) or the special administrator (post insolvency) adheres to legal and regulatory requirements. It is also important to have clearly defined rules on the rights and responsibilities of the national regulatory (or supervisory) authority, the cover pool monitor and special administrator, as well as covered bond-specific reporting requirements.

While the supervision and monitoring of covered bonds are dealt with differently across jurisdictions (or in the relevant contractual documentation), we would nevertheless expect the following features to be clear:

- The level and depth of the supervisory activity of the national regulatory authority.
- Reporting requirements to the regulator and investors, including information relating to the scope, timeliness, and frequency of reporting.
- The level and depth of the rights of the cover pool monitor (pre-insolvency) and of the cover pool administrator (post-insolvency).
- Guidance on operational aspects of the supervision of covered bonds, as well as on the transfer of the cover pool to a special administrator, post-insolvency.

The level and depth of the activities of the national regulatory authority may include the licensing of the issuer, as well as dealing with insolvency procedures of the issuer and the liquidation of the cover pool. In addition, most jurisdictions define the appointment of an independent cover pool monitor. In other jurisdictions, the duties of a cover pool monitor are carried out directly by national authorities.

In most jurisdictions, quarterly reporting of standardised information about the outstanding covered bonds and the underlying cover pool are required. However, the level of details of such standardised reporting varies widely across jurisdictions. In a strong LRF, we would generally expect quarterly reporting of all information related to the credit, market and liquidity risk of the covered bond programme. This should be sufficient to enable the national authorities to intervene in a timely manner (if required) and investors to assess changes in the risk profile of the cover pool assets and covered bonds on a regular basis.

As part of our analysis we will assess, inter alia, the strength of the conditions of the legal and regulatory (or contractual) framework with regard to the appointment of an independent cover pool monitor and special administrator, the eligibility criteria for such appointments, and the duties, powers and reporting requirements for the cover pool monitor and cover pool administrator.

A further consideration is the level and depth of the rules and regulations in place, if any, with regard to the ongoing supervision of covered bonds and issuers and, more importantly, guidance

addressing any potential operational risk involved in the transfer of the cover pool to a special administrator post-insolvency, which could either interrupt cash flows or result in the loss of cover pool assets.

While we focus on the regulatory framework (or, in the absence of a covered bond-specific LRF, the covered bond documentation) to assess the above-mentioned themes, we also consider the effective implementation of these rules and regulations at the level of the rated covered bond.

CI would generally view a LRF as strong if it provides the cover pool monitor with key and detailed responsibilities and requires intense supervision with frequent reporting to the national regulatory authority and interaction with the issuer, including regular audits by an independent party. Other key aspects of a strong framework include an independent special administrator (post issuer insolvency) with wide ranging powers and responsibilities, including with regard to bridge or repo facilities and the sale of cover pool assets. However, the special administrator must not be able to accelerate covered bonds.

KEY RATING FACTOR 4

Cover Pool Characteristics and Management

Covered bond investors need to take comfort from legal principles or contractual obligations which ensure the consistency and stability of the cover pool composition, set maximum LTV limits, and provide for the regular revaluation of cover pool assets underpinned by transparent valuation rules. These principles and obligations mitigate certain credit, market and liquidity risks embedded in the cover pool. In a strong LRF, CI would usually expect, inter alia, the application of market-standard and internationally recognised valuation procedures that are used to update the value of cover pool assets at least yearly and LTV limits of up to 80%,

Cover pools may consist of a variety of asset classes, including residential and commercial mortgages, loans to public entities, ship loans, aircraft loans, other movable assets and loans to finance exports of goods and services. While the covered bond-specific credit risk is addressed as part of the CPA, we generally regard traditional cover pool assets such as mortgage and public sector loans to have lower credit risk than other asset classes.

Loan sizes vary significantly within a cover pool. While most loans will be of an average size, some loans will be larger, thereby increasing exposure to a particular obligor and potentially the credit risk of the cover pool. It is also possible that two or more loans to one specific obligor are included in a cover pool. Cover pools can further include substitution assets and, in some cases, derivative contracts. In a strong LRF, CI would usually expect, inter alia, that concentration risk is adequately addressed by limiting exposure to a single loan and/or obligor and/or to substitution assets to no more than 15% of the cover pool assets. In addition, derivative contracts should be allowed for hedging purposes only, be duly recorded as cover pool assets, and prohibited from being terminated upon an issuer's insolvency.

As part of the LRF analysis we will assess the strength of covered bond legislation and regulation in the applicable jurisdiction and/or the applicable documentation for a covered bond programme and seek to understand whether they establish prudential rules concerning the following:

- The definition of eligible asset classes for cover pools and of the geographical areas where underlying assets can be located or registered.
- The treatment of mixed cover pools.
- Limits on exposures to other credit and financial institutions.
- The mitigation of concentration risk within the cover pool.
- The types of mortgage assets and valuation frequency.

- LTV criteria and limits for residential and commercial mortgages.
- Limits on public sector pools.
- Provisions on the use of derivative instruments.
- The quality and quantity of substitution assets.

KEY RATING FACTOR 5

Asset and Liability Risk Management

The asset and liability risk embedded in covered bonds is defined by different characteristics of the cover pool (assets) and the issued and outstanding covered bonds (liabilities). These risks stem from, inter alia:

- Different maturity profiles of assets and liabilities (liquidity risk).
- Currency and interest rate mismatches between assets and liabilities (market risk).
- Prepayment of assets (liquidity risk).
- Credit risk embedded in assets (credit risk).

Strong ALM requirements are therefore an important factor for the ongoing administration of covered bonds. Consequently we will review the LRF and/or the applicable programme documentation in order to assess whether there are appropriate requirements to address key risks. Risk-mitigating requirements may include the following:

- Regulatory minimum over-collateralisation, which is generally regarded as a best practice and, in our opinion, is the strongest form of commitment due to the consequences for an issuer of non-compliance.
- The continuous coverage of all liabilities of the covered bond programme (including those towards derivative counterparties, managers/administrators, servicers, trustees and similar entities) by cover pool assets.
- Use of derivative instruments for hedging purposes only.
- The continuation of derivative contracts upon the insolvency of the covered bond issuer.
- Regulatory limits on the use of and maximum exposure to derivative contracts.
- Regulatory limits on the eligibility of derivative counterparties (such as a minimum rating requirement, minimum number of counterparties, and on the treatment of intra-group hedging transactions).
- Provisions on the priority of payments granted to derivative counterparties within the covered bond payment structure.
- Requirements on the eligibility of substitution assets within the cover pool.
- Maturity extension provisions, notably in the case of covered bonds with soft bullet and pass-through structures.

CI would generally expect a strong LRF to include, inter alia: a statutory over-collateralisation requirement of at least 2%; coverage stress test requirements (including stresses to cover pool asset values and interest rates and exchange rates); rules on the treatment of ineligible and non-performing assets (in particular to ensure that the pool remains composed of high quality assets); and no automatic termination of derivative contracts upon issuer insolvency.

KEY RATING FACTOR 6

Liquidity Protection Mechanisms

Liquidity protection mechanisms (or liquidity buffers) in a covered bond programme are essential for addressing ALM risks and for ensuring the smooth transition of cover pool assets from the issuer to the special administrator in the event of the issuer's insolvency. As such, predefined minimum liquidity buffers are an important feature of covered bond legislation (or contractual agreements).

As part of our analysis we will review the mandatory (or contractual) liquidity protection mechanisms and the period they cover in order to assess whether they would likely mitigate the risk of payment disruption during the transition process.

CI would generally consider a liquidity protection mechanism as strong if it requires the issuer to hold liquid assets (preferably cash) to cover cash outflows from the covered bonds over the next 180 days at a minimum. Cash outflows should include all principal and interest payments on the covered bonds, as well as cash outflows on derivatives. Liquid assets should be subject to effective segregation arrangements.

If the payment of principal is subject to conditional pass-through or soft bullet structures, such payments may be excluded from the cash outflows which determine the liquidity buffer. When assessing the strength of the liquidity protection mechanism, CI will also take into account potential operational risks which may occur when transferring the cover pool assets following an issuer's insolvency, as well as the market environment for liquid assets, and their respective market value and marketability. In some jurisdictions, higher liquidity protection mechanisms may therefore be deemed necessary.

ANALYTICAL PILLAR 3

COVER POOL ADEQUACY

CPA refers to the adequacy of the cover pool as a source for timely covered bond payments under the assumption that recourse to cover assets has been exercised. To assess CPA we will generally assume a scenario in which the issuer is insolvent, the cover pool is static and under the care of a special administrator, and cover assets are the only source of covered bond payments. Our approach includes modelling the asset and cash flow dynamics of the cover pool and covered bonds and comparing stressed cash inflows from the cover pool to stressed payments due on the covered bonds at various points in the future. We will pay particular attention to periods of elevated cash flow stress, for example dates at which bullet repayments of covered bonds are due.

Assessment Criteria

For expositional purposes we divide this pillar into two sub-pillars:

1. Drivers of CPA ï where we consider the potential sources of risk and vulnerability in the cover pool, as well as factors that may affect the performance of the covered bond programme more broadly.

2. Cash Flow Analysis ï where we combine the relevant risk factors and test the ability of the covered bond to continue performing under various stress scenarios.

The outcome of the CPA assessment will ultimately determine whether the credit quality and cash flow dynamics of the covered bond programme can support an additional rating uplift of between one and three notches.

SUB-PILLAR 1

DRIVERS OF CPA

Cover pools are exposed to credit and market risks, while covered bonds are subject to market and liquidity risks. Key drivers of credit risk are the frequency and timing of asset defaults or asset delinquencies, and the amount of losses incurred following the foreclosure of defaulted assets. Market risk generally arises from exposure to variable interest rates and subsequent interest rate increases, as well as exposure to foreign currencies and adverse currency movements. Examples of liquidity risk include maturity mismatches between assets and liabilities and liquidity shortfalls due to market risk.

Our criteria for evaluating credit, market and liquid risk are outlined below.

KEY RATING FACTOR 1

Credit Risk

We assume that where the cover pool can no longer be supported by the issuer (i.e. post insolvency), non-performing and defaulted loans will no longer be removed and replaced by performing assets. In such a case, foreclosure frequency and the loss severity would be major determinants of the overall credit risk of the cover pool.

Cover pools exhibit different risk profiles depending on the nature and composition of the cover assets and the credit policy of the issuer. The credit risk profile of a mortgage cover pool, for example, will be defined by the percentage mix between residential mortgage loans and commercial mortgage loans, the type of mortgage collateral backing the loans, the LTV profile of the loans, and the location of the mortgage collateral. Given the importance of the issuerôs credit policy for the credit and market risk embedded in a cover pool, we will review of this credit policy on an ongoing basis.

Due to the different risk profiles of cover pools, we will use asset class-specific assumptions for prepayments, foreclosure frequency and loss severity. The rating stresses we apply will be explained in supplementary criteria reports and in individual covered bond rating reports.

Delinquent loans are another risk feature of static cover pools. Delinquencies refer to the non-payment of interest and/or principal for a certain period of time, after which payments recommence or the loan defaults.

To analyse the credit and cash flow fundamentals in a cover pool we have established rating criteria for the following rating factors:

(1) Foreclosure Frequency

(2) Recovery Proceeds

(3) Delinquencies

These rating criteria will generally be applied for relatively granular cover pools. If a cover pools consists of mainly bulky assets, resulting in credit risk concentrations, we will increase our rating assumptions to account for the higher risk.

SUB-FACTOR 1

Foreclosure Frequency

In our analysis, foreclosure frequency is defined as the percentage of assets in the cover pool which are likely to default at a certain point in time (foreclosure timing) and where the underlying collateral will subsequently be foreclosed over a period of time (length of foreclosure period). While defaulted assets may no longer provide cash inflows, the foreclosure of collateral may lead to lower proceeds than the outstanding debt amount, resulting in losses which could impact the timely payment of interest and principal due on the covered bonds.

To calculate the foreclosure frequency for the different asset types we have established rating frameworks which encompass the major credit risks. These allow us to determine the cover pool specific foreclosure frequency based on the performance information and asset characteristics of the relevant cover pool assets.

We illustrate our approach using mortgage loans as an example. Key credit risk drivers for mortgage loans include, inter alia, LTV ratios, debt-to-income ratios, borrower and asset location, remaining term to maturity, seasoning, and property type. Other cover pool assets, such as loans to small- and medium-sized entities (SMEs), would be analysed in a similar way.

Step 1

First, we establish a base scenario as a function of the debt-to-income ratio and the LTV ratio: the higher the debt-to-income and LTV ratios, the higher the base scenario foreclosure frequency.

Step 2

This base scenario may be adjusted after taking into account the following:

- Property location (good, average, weak);
- Remaining term to maturity;
- Seasoning;
- Employment status of the borrower (with a negative adjustment for self-employment and a positive adjustment for civil servants and pensioners);
- Interest rate type (fixed or floating); and

- Property type (commercial or residential, including various sub-categories).

Step 3

The outcome of the above determines the base scenario foreclosure frequency commensurate with a 6Bô rating stress scenario in a particular jurisdiction. The base scenario foreclosure frequency will subsequently be multiplied with a scenario multiplier for each rating category. To allow comparability we have established scenario multipliers for each rating category. However, on a case-by-case basis, adjustments to these scenario multipliers may be warranted.

The scenario multiplier increases as the distance between the potential CBR and ICR increases, in line with our rating differentiation matrix.

The base scenario foreclosure frequency mentioned in Step 1 is normally derived from country-specific default rates for certain asset classes, as published by national authorities. We use these average default rates to calculate default data points for a given country, i.e. default data that captures market asset performance, grouped by the year of the asset's origination (mean default rates and standard deviations). This allows us to compare average performance of different asset types over different time periods in an economic cycle.

Due to different credit policies amongst issuers, the average default data points need to be adjusted to account for programme-specific credit risk, which may be higher or lower than the default data points.

To calculate any deviation from the mean default data points we generally compare the market delinquency data with the performance data published by the issuer, including 90 days past due and/or delinquent loan information (where available).

SUB-FACTOR 2

Recovery Proceeds

The recovery proceeds from foreclosed assets will be determined using the following formula:

Recovery Proceeds = (Current Asset Value x (1 – MVD)) x (1 – QSA)

Current asset values are obtained from data reported by the issuer or calculated by indexing initial asset values. Market value decline (MVD) is derived for the relevant jurisdictions and asset classes by using historical market performance data (publicly available or proprietary). We also make assumptions about how recovery proceeds would likely be affected should foreclosed assets need to be sold quickly, which we express as a quick sale adjustment (QSA) discount.

Other drivers in our asset analysis include foreclosure timing (when individual or clusters of loans will default during the term of the covered bond programme) and the length of the foreclosure process. The latter varies significantly between jurisdictions depending on the respective legal framework and consumer protection laws. Longer foreclosure periods will generally result in higher interest shortfalls and shorter foreclosure periods in lower interest shortfalls, whereas the opposite dynamics apply for the amount of recovery proceeds.

Our assumptions for MVD, foreclosure timing, and the length of the foreclosure process will be updated frequently and complemented by academic and research studies.

SUB-FACTOR 3

Delinquencies

In addition to analysing the behaviour of the cover pool in stressed default scenarios, we will also test what impact certain levels of delinquent cover pool assets have on the cash flow derived from the pool.

While for defaulted loans the non-payment of interest and principal is assumed to persist from a certain point in time onwards, in our analysis delinquent borrowers resume making payments at the end of the delinquency period.

We generally assume that delinquencies will persist for up to 12 months, after which the assets become performing again. All or part of the accrued interest and principal shortfalls are repaid or recovered within the following 24 months. The length of non-payment, the recovery timing, and the portion of recovered shortfalls depend on market practices and consumer laws in the particular jurisdiction.

The percentage of delinquent loans is a function of the foreclosure frequency, i.e. the defaulted assets. In certain scenarios, we assume that a multiple of the defaulting assets becomes a delinquent asset. The multiple for our base case rating scenario at the ôBôlevel depends on the type of assets in the cover pool and the jurisdiction of these assets.

This approach will be applied to covered bond programmes where delinquencies represent a small portion of the cover pool at the time of the analysis and on an historical basis. For cover pools with larger portions of delinquent assets we will apply individual default and delinquency assumptions.

KEY RATING FACTOR 2

Market Risk

Market risks embedded in cover pool assets and covered bonds include interest rate and currency risk. Interest rate duration and interest rate type do not generally match across cover pool assets and covered bonds. Cover pool assets and the issued covered bonds can also be denominated in different currencies.

Floating rate cover pool assets or covered bonds may be subject to adverse interest rate movements and foreign currency assets or covered bonds may be exposed to exchange rate movements if they are not sufficiently hedged. The results of interest rate and/or exchange rate movements can alter cash inflows as well as cash outflows, which in turn can result in payment disruption at the covered bond level. Our analysis will generally consider the base currency of the covered bond programme, which is generally dependent on the location of the issuer or, in some cases, the LRF or the covered bond programmeôs documentation.

We will apply (i) interest rate stresses and (ii) currency stresses for the interest rate and currency exposure in a covered bond programme as explained below. Depending on the programme specific risk profile we may increase or decrease the rating assumptions to account for any idiosyncratic risks.

SUB-FACTOR 1

Interest Rate Sensitivity

To analyse the sensitivity of the cover pool and covered bonds to interest rate movements we run stable, rising and falling interest rate scenarios.

As a first step, we will analyse the interest rate profile of the cover pool, including the balance between fixed rate and floating rate loans. Secondly, we will analyse the interest rate profile of the

covered bonds. Covered bonds can be issued with a fixed rate or floating rate coupon, the latter being based on market reference rates such as EURIBOR and LIBOR. Some covered bonds may also include step-up coupons or margins.

We will generally assume that the direct impact of interest rates shocks would be neutral in cases where cover pool assets and covered bonds pay a fixed rate. We would, however, apply interest rate stresses in cases where, for example, a portion of the cover assets and/or cover bonds pays a flexible rate and where it is possible for cover assets to switch from a fixed to flexible rate after a period of time.

Further, we will consider the interest rate hedging strategies of on-balance-sheet covered bond programmes and SPV-based covered bond programmes. Depending on the effectiveness of such hedging strategies some or all covered bonds in a specific programme may be subject to a higher or lower degree of interest rate risk.

In a stable interest rate scenario, we will apply current interest rates throughout the term of our analysis. For rising and falling interest rate scenarios, we will analyse interest rate movements for key reference rates based on historically available data. Based on all-time lows and highs we will establish a matrix for key reference rates. We will further test the cover pool against negative interest rates, if applicable.

SUB-FACTOR 2

Sensitivity to Currency Mismatches

Cover pools may include loans and/or underlying assets in currencies different from the base currency. Currency movements can therefore alter the cash inflow derived from cover assets. We will apply stresses to the various currency rates depending on the exposure in the cover pool and considering any hedging strategy at loan or asset level.

Covered bonds in one programme can be issued in multiple currencies and may therefore be affected by adverse currency movements. An adverse currency movement can change the cash flow needed to pay interest and principal on a timely basis. We will therefore analyse the hedging strategy for currency risk of on-balance-sheet as well as SPV-based covered bond programmes.

Where appropriate hedging agreements exist at cover pool and covered bond level until the maturity of either assets or liabilities, CI may decide not to stress cash flows with varying foreign exchange rates if the currency exposure is below a certain threshold (considering the amount and term to maturity), which will be determined on a country-by-country basis.[2] If the currency exposure exceeds these limits, we will perform the following analytical steps:

1. We will generally use the current exchange rate as the starting point for both the cover pool and covered bonds.

2. Based on our analysis of historical currency movements and other research, we will establish stresses for various currency pairs which may range from a depreciation of 30% to an appreciation of 170%. We will apply the applicable stresses to the current exchange rate and analyse the impact of various exchange rate scenarios. The severity of our exchange rate stresses will take into account, inter alia, the depth and liquidity of the respective currency market.

[2] We will only follow this approach if the hedging agreements can neither be terminated nor would automatically default upon the issuer's insolvency.

KEY RATING FACTOR 3

Liquidity Risk

Liquidity risk generally arises from maturity mismatches between assets and liabilities and differences in the speed of payment or prepayment of assets and liabilities. Mortgage loans usually repay on a regular basis while in most jurisdictions covered bonds have bullet maturities. The term to maturity for covered bonds can also be shorter or longer than the remaining term for cover pool assets. The greater the maturity gap and the higher the prepayment speed of cover pool assets, the higher the liquidity risk.

Other factors which contribute to the liquidity risk around maturity and payment dates include the time frame around an issuer default or resolution (during which there is a risk of payment disruption and commingling of funds) and cover asset liquidation risk, in the case of the cover pool becoming static post issuer insolvency.

Additional liquidity shortfalls are also possible due to mismatches in the interest rate duration and interest rate types across assets and liabilities and the exchange rate risk due to different currency profiles between assets and liabilities.

While natural hedging is a preferred market practice for some covered bond programmes, certain levels of interest and currency exposure at either cover pool or covered bond level may require the use of derivative contracts for hedging interest rate and currency risk. Some covered bond legislation/regulations allow the use of derivative contacts for hedging purposes only.

Over-collateralisation, matching principles, and the use of derivatives are the main tools for mitigating the liquidity risk associated with covered bonds. These are therefore key elements of our rating analysis.

SUB-FACTOR 1

Maturity Matching

Covered bonds are often issued with bullet maturities. Newer developments include conditional pass-through structures, soft-bullet maturities, maturity extensions, and call options.

We will consider soft-bullet maturities, maturity extensions, and call options as part of our standard covered bond analysis. Soft-bullet maturities and other maturity extension clauses provide an extendable maturity date that follows the scheduled maturity date, subject to certain conditions. This gives extra time for the issuer or special administrator to refinance or sell cover pool assets to raise funds for the repayment of the covered bonds. Where there are extendable maturities in a covered bond programme, we will rate to this extended date, which is considered to be the final maturity date.

However, if it is unclear from the documentation whether failure to pay on the scheduled maturity date would trigger an issuer event of default or kick-start the sale of cover pool assets, CI may not give full credit to the maturity extension.

The distinctive features of conditional pass-through structures will be reflected in CIs cash flow analysis.

Regardless of the chosen repayment or maturity structure of a covered bond, it is usually not aligned to the repayment structure of the underlying cover pool, which is often characterised by annuity repayments or other forms of frequent repayments. We will therefore assess the differences in the repayment profiles of covered bonds and cover pools to identify pronounced gaps in the repayment profiles. For example, if a number of covered bonds are due to be repaid at a certain date (creating the need for significant cash outflows), we will stress the cash flow dynamics of the covered bond programme around this date by applying additional credit and cash flow stresses.

SUB-FACTOR 2

Over-Collateralisation

Over-collateralisation functions as the main mitigation tool for most risks embedded in covered bonds, including risks relating to the underlying cover pool assets. Sufficient over-collateralisation can provide cash flow buffers for a certain percentage of defaulted and delinquent loans, interest rate and currency mismatches, as well as for divergent maturities. Over-collateralisation is therefore the most important credit enhancement for covered bond investors.

Higher levels of over-collateralisation provide better protection to covered bond investors in the event of issuer insolvency, resulting in a market practice that issuers generally provide levels of over-collateralisation well above the statutory minimum (so-called voluntary over-collateralisation). Such voluntary over-collateralisation may be of a contractual nature (contractual over-collateralisation) or at the full discretion of the issuer (discretionary over-collateralisation).

CI will generally use contractual collateralisation as the starting point for its cash flow analysis, subject to the following considerations. In particular, CI may give credit to discretionary over-collateralisation (where this is higher than the contractual level), where we consider the issuer to be strongly obligated to maintaining that level over time. This may be demonstrated, at least in part, by the issuerôs ability to confine any changes in over-collateralisation to a range of no more than five percentage points, year-on-year, over the past five years. We would typically expect this to be more likely for issuers with an ICR of ôBBB-ô or above since, in our view, there is a greater risk of discretionary over-collateralisation migrating closer to statutory requirements for lower rated issuers as they are generally more likely to reduce the level as their own credit quality decreases, for example to meet other payment obligations or to raise funds via repo transactions with the central bank. Consequently, in the case of issuers with an ICR of below ôBBB-ô, CI will generally focus on the level of contractual over-collateralisation, where applicable, or else on statutory over-collateralisation.

We are less likely to take discretionary over-collateralisation into account in jurisdictions where there is the potential for such over-collateralisation to be returned to the insolvency administrator or issuer. We may, however, give partial credit to such over-collateralisation where only part of it is expected to be subject to removal by the competent authority or another third party.

SUB-FACTOR 3

Derivative Analysis

Another tool for mitigating risks resulting from interest rate, currency and maturity mismatches is the use of derivative contracts, such as interest rate or currency swaps. As part of our CPA assessment we will analyse all derivative contracts and their impact on the cash flow dynamics of the covered bond programme. We would generally expect derivative contracts to be structured to mitigate risks. However, depending on the outcome of the derivative analysis, we may have to apply additional stresses to the cash flows of the covered bond programme.

Derivative analysis is linked to our LRF analysis and counterparty analysis. In this sub-factor we focus on the dynamics of the contractual agreement and its impact on the cash flow of the covered bond programme. The ability of the transaction counterparty to fulfil its obligations is assessed as part of our counterparty analysis (see Section 3).

SUB-FACTOR 4

Prepayments

Mortgage loans may be subject to prepayments which can alter the contractual cash flow structure of such loans. Prepayment risk, in our opinion, depends on the floating or fixed rate nature of loans, is usually higher for commercial loans than for residential loans, and varies between different jurisdictions. For example, fixed rate German residential loans generally have a lower prepayment

risk due to the penalties associated with early prepayment, while floating rate UK residential loans exhibit higher prepayment risk.

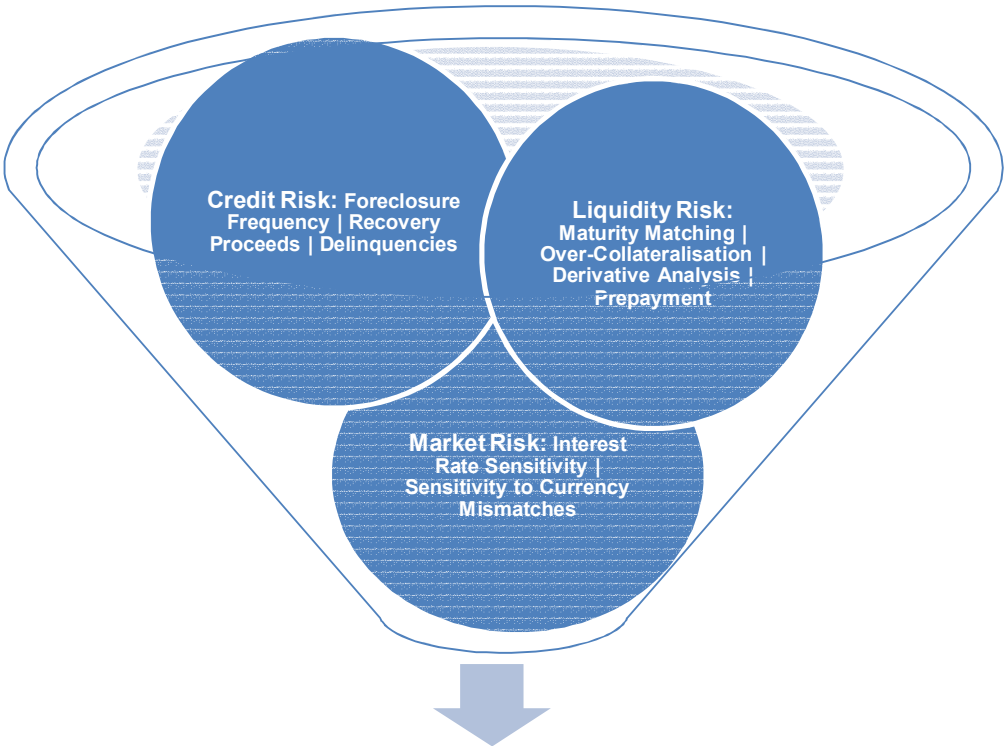
As part of our analysis we will generally model high prepayment as well as low prepayment scenarios. We will assess the prepayment risk of a cover pool considering the type of collateral backing the loans and the general prepayment patterns for different jurisdictions. Prepayment rates may be very different in developed markets compared to emerging markets and jurisdictions with developing real estate markets. In addition, we may adjust these prepayment assumptions for cover pools with mainly floating rate assets. Given that cover pools consist of loans from a mix of jurisdictions we will calculate the weighted average prepayment rate for the cover pool.

SUB-PILLAR 2

CASH FLOW ANALYSIS

In our cash flow analysis we combine the credit, market and liquidity risks that the covered bond programme is exposed to and analyse their impact on cash flows. The key inputs into our cash flow rating model are illustrated in Box 5.

BOX 5: CASH FLOW ANALYSIS – INPUTS AND OUTCOME



Cover Pool Adequacy

(timely payment of interest and principle on the covered bonds at all times and all applicable rating stress scenarios)

CI will closely look at the cash inflow profile of the cover pool and the cash outflow requirements of the covered bonds to determine periods of time during which the covered bond programme may be subject to pronounced liquidity risk. During such periods bridge finance, repo facilities from the central bank, expedited sales of assets from the cover pool, or the issuance of new covered bonds may be required to meet cash outflow requirements.

We will typically disregard diminutive (minor) cash shortfalls generated by our cash flow model where these are curable within 90 days. What constitutes a diminutive cash shortfall will be defined on a country-by-country basis and will take into account the strength of the LRF. If one of the two conditions does not hold, we may assume bridge finance and repo facilities from central banks, where applicable, and take into account the associated costs. Expedited sales of assets from the cover pool at certain discount rates ï which will depend on the country the asset is located in and the type of asset ï may also be considered, where appropriate.

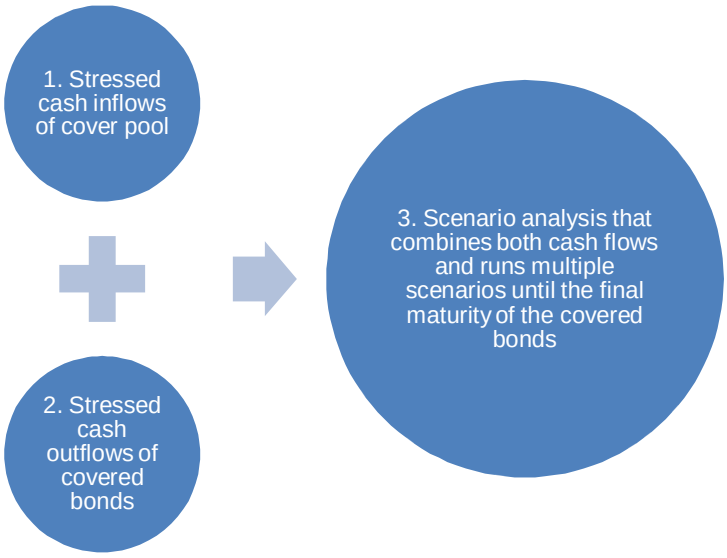
Before applying one of the above liquidity sources we will carefully assess the availability of these in the relevant jurisdiction and whether the cover bond framework or documentation provides the special administrator with the necessary powers to enter into the required contracts.

The use of conditional pass-through or soft bullet structures will further be considered in our cash flow analysis.

In a post-insolvency scenario we will further assume that all cash inflows are trapped on account and used to pay interest and principal due on the covered bonds. The rating model we use can simulate, amongst other things, the application of a negative carry margin to account for re-investment costs. We will also take into account service fees for costs associated with the appointment of a special administrator. In the absence of mitigating factors, CI may also factor in commingling risk and lost cash flow during the transition period from issuer to special administrator.

Our cash flow analysis comprises three distinctive steps as illustrated in Box 6.

BOX 6: CASH FLOW STRESSES



Depending on the specific risk profile of the covered bond programme we may increase or decrease our rating assumptions to account for any idiosyncratic risks.

While the credit, market and liquidity risk of bulky and substitute assets will first be analysed outside the rating tool, the impact these have on the cash flow dynamics of the covered bond programme will be included in our model in the form of either additional cash flow stresses or benefits to the cash inflows.

To conduct our analysis we will use information from statutory reporting, supplemented by the harmonised transparency template by the European Covered Bond Council (where available), and granular data provided by the issuer for both the cover pool and covered bonds.

Outcome of the CPA assessment

The outcome of the CPA assessment will show which rating stress scenarios the covered bond programme is able to withstand and therefore will have an important bearing on the final CBR. Under our approach, a covered bond issuer with an ICR of ôA+ôand a high credit quality cover pool which passes all ôAAAô rating stress scenarios can achieve a three-notch rating uplift (in addition to the uplifts determined by the LRF analysis), while a covered bond issuer with an ICR of ôBBôand a high credit quality cover pool which passes all ôAAAô rating stress scenarios can only achieve an additional one-notch uplift.

On the other hand, a covered bond issuer with an ICR of ôBBBôand a low credit quality cover pool which only passes ôBôrating stress scenarios may receive a rating deduction of up to six notches following the CPA (offsetting much or all of any LRF-related uplift).

This approach reflects our view that the asset quality of the cover pool may migrate closer to statutory requirements for lower rated issuers, resulting in a smaller rating uplift (in notches) compared to a similar cover pool (in terms of asset quality) from a higher rated issuer. Lower rated issuers may be under pressure to improve profitability by increasing the risk profile of the loan book, or may no longer be able to support the covered bond programme above statutory requirements. In our view, such migrations impact both the likelihood of default and the loss severity in the event of a default.

Our rating differentiation matrix also allows for a different treatment of covered bonds backed by cover pools with credit profiles of different strength for issuers with the same ICR.

As part of the cash flow analysis we will calculate break-even over-collateralisation for each rating level. Break-even over-collateralisation is the minimum amount (or percentage) of excess cover pool assets which are required for the covered bonds to pass all the stress scenarios that CI applies to a particular rating grade. Such over-collateralisation provides an indication of the stability of the rating outcome of the CPA and thus ultimately of the CBR as well. The closer break-even over-collateralisation is to current contractual over-collateralisation, the higher the probability of a rating change if the risk profile of the covered bonds and cover pool assets changes.

4. OTHER RATING CONSIDERATIONS

The following are considered outside of the three analytical pillars but may have an important influence on the final CBR assigned.

COUNTERPARTY ANALYSIS

Covered bond programmes may include agreements with counterparties under which the latter are, for example, required to hold assets (including cash), make monetary payments, provide protection against interest rate risk and currency risk (e.g. through hedging agreements), or carry out certain operational tasks. In addition, should the issuer become insolvent, its cash accounts may be moved to a third-party.

The failure of a counterparty to perform its obligations in a timely manner could potentially affect the cash flow dynamics of the cover assets or covered bonds. Consequently, we assess the credit standing of counterparties and assess the strength of the underlying programme documentation.

In particular we will assess whether a counterpartyôs impact on the covered bond programme is material or marginal, including whether exposure to the counterparty is cash flow relevant or important for operational tasks.

We define as a ôkeyô counterparty a third party who has a material impact on the performance of the coved bond. Non-performance by a key counterparty, or a worsening of its own credit standing, may therefore lead to a downgrade of the supported covered bonds, regardless of the performance of the cover assets.

As part of our counterparty analysis we will assess and monitor the credit standing of key counterparties, the replacement framework, and other mechanisms to mitigate structural risks. We will further analyse whether any of the agreements with a key counterparty are considered bespoke and therefore not replaceable or is provided by inter-group counterparties of the issuer. The result of this assessment could result in a direct link of the rating of the covered bond programme to the key counterparty.

SOVEREIGN RISK

CIôs bank rating framework recognises that banks and sovereigns have a symbiotic relationship, that the sovereign is a source of systemic risk, and that sovereign distress ï and the accompanying crisis-induced policy response ï can have serious repercussions for the financial system and ultimately the default risk of individual banks. Consequently, the ICR assigned to a bank is generally constrained by the credit rating of the sovereign of the country in which the bank is domiciled.

At the issue level, while CBRs may also be constrained by sovereign risk factors, we see more scope for loosening ï though not removing ï the link between the two. In particular, we recognise that certain structural credit enhancements (e.g. over-collateralisation and liquidity reserves) may make the credit quality of a covered bond more resilient than the issuing bank to stressed economic conditions, while other enhancements may enable certain types of sovereign risk ï particularly transfer and convertibility (T&C) risk ï to be mitigated to a significant degree. The latter include cross-currency swap arrangements with offshore counterparties, as well as offshore bank accounts and liquidity reserve funds managed by off-shore security agents (to ring-fence currency swap and cover pool asset proceeds).

CIôs view on sovereign risk and covered bonds and the criteria we will apply to determine whether a CBR can be higher than the sovereign rating and, if so, by how many notches will be set out in a supplementary criteria note before we assign ratings in jurisdictions where the sovereign is rated below ôAAAô

STRUCTURAL ENHANCEMENTS

Structural enhancements can mitigate some potential limitations of the LRF and reduce counterparty and sovereign risk, thereby improving the credit strength of a covered bond.

As part of our analysis we will assess the strengths and weaknesses of covered bond-specific structural enhancements on a case-by-case basis to determine the effectiveness of these as mitigants. Examples of structural enhancements include, inter alia, measures to enhance the LRF (described below) and measures to reduce sovereign risk (referred to above).

LRFs may differ between countries, particularly with respect to: (i) the scope and comprehensiveness of criteria and associated provisions underpinning covered bond issuance; and (ii) the strength, or strictness, of such requirements and legal stipulations.

For example, the LRF in one country may contain comprehensive rules for all six areas referred to in Analytical Pillar 2. However, in another country it may be narrower in scope (focusing on key rating factors 1, 2, 3 and 5), or less specific in some key areas (e.g. on the management and characteristics of cover pools, or with regard to liquidity protection mechanisms). In order to be able to compete for investors at the international level, covered bond issuers may decide to make contractual commitments vis-à-vis asset eligibility criteria or other conditions that are either not present or are weakly specified in the LRF. Such issuer-determined additions may include LTV limits, limits on eligible asset classes, and rules on the frequency of valuations.

Even where the scope of covered bond rules is broadly similar between countries (covering all six areas identified in Analytical Pillar 2), there may still be significant differences in terms of the stringency of those rules. Consequently, in countries where regulatory/statutory rules are deemed to be less stringent (or less prudent) by the market, the issuer may add compensatory risk-reducing elements to its covered bond documentation. Typical examples include lower LTV and concentration limits and higher liquidity reserves.

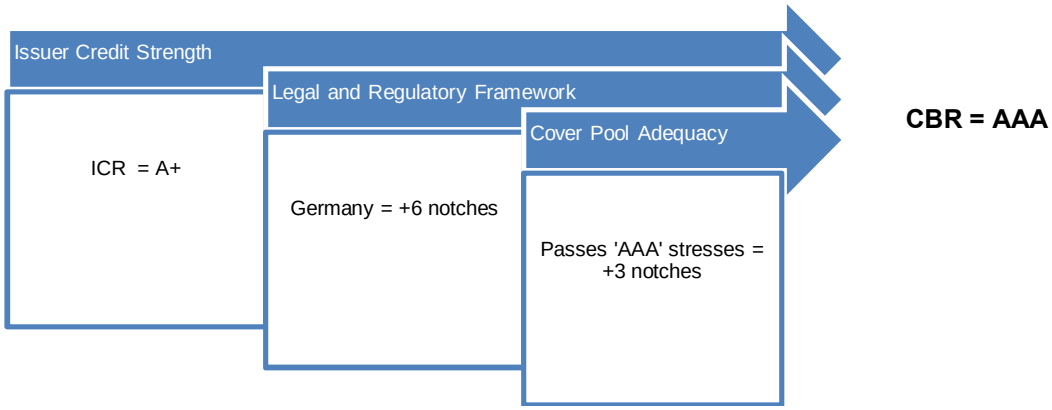
Where CI believes that structural enhancements contained in the transaction documentation sufficiently address shortcomings in the LRF, we may give credit to those enhancements as though they were part of the LRF. However, the maximum rating uplift (above the ICR) that may be derived from the LRF, or from the LRF in combination with compensatory structural enhancements, is limited to six notches.

For example, if an uplift of four notches is warranted under our LRF criteria, we may award an additional uplift of one or two notches provided the relevant weaknesses in the LRF are adequately addressed in the transaction documentation.

ANNEX 1: EXAMPLES OF CI'S APPROACH TO RATING UPLIFTS

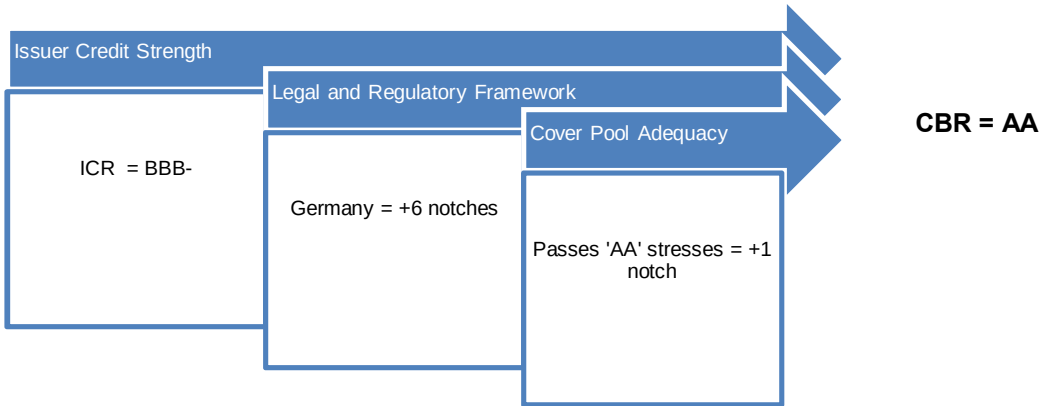
Example 1 shows a German covered bond issuer with an ICR of óA+ô The LFR analysis results in an uplift of six notches and the CPA an additional uplift of three notches as the cover pool and covered bonds pass all óAAAôrating stress scenarios. The final CBR is óAAAô

EXAMPLE 1: German Issuer with 'AAA' Cover Pool



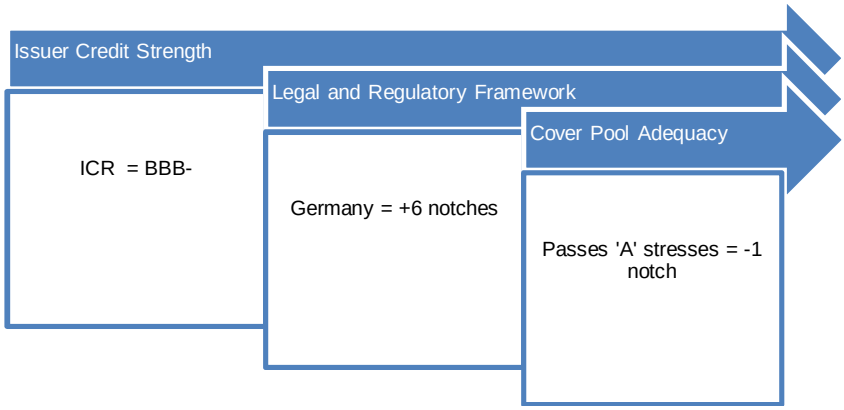
Example 2 shows a German covered bond issuer with an ICR of óBBB-ô The outcome of the LFR assessment is again an uplift of six notches. However, the CPA only shows room for an additional uplift of one notch as the cover pool and covered bonds pass stresses at the óAAôlevel. The final CBR is óAAô

EXAMPLE 2: German Issuer with 'AA' Cover Pool



Example 3 shows a German covered bond issuer with an ICR of ôBBB-ô The outcome of the LFR assessment is again an uplift of six notches (to óAA-ô). However, as the cover pool and covered bonds only pass rating stresses at the óAôlevel, the CPA assessment results in a negative rating adjustment of one notch. Hence the final CBR is óA+ô

EXAMPLE 3: German Issuer with 'A' Cover Pool



ANNEX 2: ISSUE CREDIT RATINGS: RATING SCALE AND DEFINITIONS

CIÕs long-term issue rating scale is applicable to bonds (including covered bonds), other debt instruments, and Sukuk ratings with an original maturity in excess of one year. Short-term issue ratings are generally assigned to financial obligations with an original maturity of up to one year.

Long-Term Issue Credit Ratings

Investment Grade	
AAA	Bonds and financial obligations that are rated AAA are considered to be of the highest quality. They carry the smallest degree of investment risk. Interest payments are protected by a significant and exceptionally stable margin, and principal is extremely secure. There are unlikely to be significant changes in the various protective elements. In any case, such possible changes are very unlikely to weaken the fundamentally strong position of such issues.
AA	Bonds and financial obligations that are rated AA are considered to be of very high quality by all criteria. These are high-grade instruments, but are rated lower than AAA instruments as the elements of protection may not be as large and there may be slightly greater fluctuation within the margin of protection. The overall risk is slightly greater than for AAA obligations.
A	Bonds and financial obligations that are rated A exhibit many positive investment characteristics and are classed as upper- to medium-grade investment quality. Various factors giving protection to principal and interest are considered very sound, but certain components may be evident which indicate future potential impairment.
BBB	Bonds and financial obligations that are rated BBB are regarded as medium-grade. These securities are neither highly nor lowly protected. Both interest payments and principal security are currently adequate but certain protective elements may be missing or may be slightly more unreliable over the longer-term. Obligations rated BBB do not display very strong investment characteristics. The obligations form the lowest investment grade level and some may possibly possess speculative characteristics.
Speculative Grade	
BB	Bonds and financial obligations that are rated BB are below investment grade and possess speculative characteristics. There is some uncertainty in the longer-term future of these instruments. The protection of interest and principal is likely to be very moderate and thereby not well cushioned during both favourable and unfavourable conditions in the future.
B	Bonds and financial obligations that are rated B generally do not possess attractive investment characteristics. The certainty of interest and principal payments, or of maintenance of other terms of the contract, over the long term, is limited.
CCC	Bonds and financial obligations that are rated CCC are of poor standing. Such issues are vulnerable to default, with significant uncertainty with respect to the payment of principal or interest.
CC	Bonds and financial obligations that are rated CC are highly speculative. Such issues are highly vulnerable to default or have other substantial weaknesses.
C	Bonds and financial obligations that are rated C are of low class. Such issues are regarded as possessing extremely poor prospects and are extremely vulnerable to non-payment.
D	The issue is in payment default. Interest or principal payments are not made on the due date.

Short-Term Issue Credit Ratings

Investment Grade	
A1	The highest short-term rating assigned. Issues are considered to have the highest capacity for timely repayment of short-term financial obligations. The issues in this category exhibit extremely strong protection factors. Interest payments and principal are safeguarded by a wide margin. Issues with a particularly strong profile have a ñ+ò affixed to the rating.
A2	The capacity for timely repayment of interest and principal is high. The issue and/or the issuer possess highly favourable characteristics and protection factors are good.
A3	Satisfactory capacity for repayment of interest and principal. However, issues in this category are more vulnerable to adverse changes in business, economic and financial conditions. Protection factors are adequate but not as strong or certain as obligations in the higher short-term rating classifications.
Speculative Grade	
B	Speculative capacity for timely repayment of interest and principal. The timely repayment of obligations is vulnerable to adverse changes, and protection factors are not high.
C	Doubtful capacity for timely repayment of interest and principal. Default risk is high.
D	The issue is in payment default. Interest or principal payments are not made on the due date.

CI Ratings appends ó+ô and ó-ô signs to long-term bond, other debt and Sukuk ratings in the categories from óAAô to óCCCô to indicate that the ability of the obligor to meet its financial commitment on the obligation is, respectively, slightly greater or less than that of similarly rated peers.

Outlook: expectations of improvement, no change or deterioration in a long-term rating over the 12 months following its publication are denoted ó Positiveô, ó Stableô or ó Negativeô

ANNEX 3: GLOSSARY OF SELECTED TERMS

Asset Segregation	The extent to which cover pool assets and over-collateralisation are effectively ring-fenced from the claims of other creditors in the event of issuer insolvency.
Bankruptcy Remote	The term generally applies to an entity or issuer that is not likely to have an incentive to commence insolvency proceedings voluntarily and is not likely to have involuntary insolvency proceeding commenced against it by third-party creditors; or to an issue that is not likely to be affected by the insolvency of an entity or issuer. The bankruptcy remoteness of the covered bond from the covered bond issuer relates to effective arrangements which ensure the remoteness of cover pool assets in the event of the insolvency of the covered bond issuer or in the event of a default by the covered bond issuer.
Borrower Income	Income which the borrower of a loan receives through, inter alia, salary, savings and/or pension payments.
Bullet Maturity	The repayment of the full principal of a bond in a single payment on the legal maturity date.
Call Option	A liability that can be repaid ahead of the scheduled maturity fate at the option of the borrower/issuer.
Claw-Back Risk	Risk that a transfer of assets to a cover pool could be reversed if it occurs within a certain timeframe prior to the insolvency of the covered bond issuer. The timeframe and the preconditions for a claw back are subject to the applicable insolvency law in the respective country. Such regulation aims to protect creditors in case of the insolvency of a covered bond issuer against inappropriate assets transfers shortly before the issuer becomes insolvent. Common timeframes range from six to 12 months.
Commingling Risk	The risk that the cash belonging to the issuer is mixed with cash belonging to a third party or is transferred to an account belonging to a third party in such a way that in the event of the bankruptcy/insolvency of the third party the cash cannot be separately identified or is frozen in the account of the third party.
Conditional Pass-Through	A contractual or statutory arrangement which specifies that failure to pay principal on a covered bond on the scheduled maturity date does not constitute an event of default. Instead, the covered bond converts to a floating rate security after its scheduled maturity date and is repaid as and when sufficient cash inflows are available from the underlying cover pool assets by either selling the assets or through regular re- and prepayment of the assets.
Contractual Over-Collateralisation	Over-collateralisation in excess of any statutory over-collateralisation as stipulated in the documentation of a cover bond programme.
Cover Pool Administrator	A special administrator appointed in some jurisdictions after the insolvency of the issuer and charged with fulfilling the scheduled payment obligations of the covered bond programme. In jurisdictions where the appointment of a special administrator is not foreseen by the law/regulation, the bankruptcy liquidator of the issuer may also function as quasi cover pool administrator.
Cover Pool Monitor	A cover pool monitor is usually appointed when a covered bond programme has been established. The cover pool monitor is typically an internal or external entity (other than the ordinary auditor of the issuer) and is responsible, inter alia, for monitoring all coverage requirements and eligibility tests as well as conducting random audits of the cover pool. Where similar tasks are directly carried out by national authorities, the appointment of a cover pool monitor may not be necessary. The cover pool monitor and/or the issuer should regularly report to the relevant national authority.

Cover Pool Register	A statutory or contractual record that contains information regarding the assets in the cover pool.
Credit Risk	Risk that a lender will not be repaid at all or will be repaid less than the amount owed or will be repaid over a longer time period than was originally agreed.
Currency Risk	Arises from the change in price of one currency in relation to another. Investors or borrowers that have assets or liabilities in different currencies are exposed to currency risk that may create unpredictable profits and losses. Currency risk can be reduced by hedging, which offsets currency fluctuations.
Debt-to-Income-Ratio	Borrower debt divided by borrower income. The higher this multiple, the greater the prospect of a borrower defaulting due to over-indebtedness.
Delinquency	Failure to make a payment on a debt obligation by the specified due date.
Foreclosure	To take legal proceedings against a debtor that owns a piece of real property that has been mortgaged as security for a loan. In a foreclosure, the lender seeks the right to sell the property and to use the proceeds of the sale to satisfy all amounts owed by the debtor with respect to the loan.
Hard Bullet	A covered bond where a failure to repay the principal on the scheduled maturity date constitutes an event of default.
Hedging	General term used to refer to strategies adopted to offset investment risk. Examples of hedging include the use of derivative instruments to protect against interest rate or currency risk.
Interest Rate Risk	The risk that the interest earned on assets acquired in a lower interest rate environment will not be sufficient to service the payments required in connection with liabilities incurred in a higher interest rate environment.
Interest Rate Swap	A binding agreement between two counterparties to exchange periodic interest payments on a predetermined principal amount (i.e. the notional amount). Typically, one of the counterparties will pay interest at a fixed rate and receive interest at a variable rate, while the converse will apply to the other.
Issuer	The financial institution that issues the covered bonds or ultimately benefits from the funding is referred to in this report as the issuer. In practice, the credit exposure to this financial institution may be indirect, through an intercompany loan or a guarantee rather than through direct issuance.
Legal Final Maturity	The date by which the principal balance of securities must be repaid.
Loan-to-Value (LTV) Ratio	The balance of a mortgage loan divided by either the value of the property or the price paid by the borrower to acquire the property. The LTV ratio is a measure of how much equity the borrower has in the asset that secures the loan. The higher the LTV ratio, the less equity the borrower has at stake and the less protection is available to the lender by virtue of the security agreement.
Mortgage	A security interest in real property given as security for the repayment of a loan.
Over-Collateralisation	The amount of cover assets exceeding the amount of covered bonds outstanding and expressed as a percentage of the covered bonds outstanding.
Over-Indebtedness	Borrower owes more debt than he can repay by from regular income or asset ownership. Over-indebtedness can result in borrower insolvency.

Set-Off Risk	Customers of a covered bond issuer may be able to ñset-offò deposits they hold at this bank against claims the issuer has with regard to a loan such customers have been granted by the issuer. A set-off of deposits against loans which are part of the cover pool could reduce the size of the cover pool and thus, negatively impacting the proceeds covered bond investors may achieve from the cover pool in case of the insolvency of an issuer. The set-off risk may be limited by informing customers about the transfer of loans to a cover pool and the resulting loss of their set-off rights. The details and extend of set-off rights depend on the applicable consumer protection and insolvency laws in the respective country.
Soft Bullet	Contractual or statutory arrangement which specifies that a failure to make a bond repayment on the scheduled maturity date does not constitute an event of default. In such an event, the underlying covered bond converts to a floating rate security after its scheduled maturity date and is repaid as and when sufficient cash inflows are available from the underlying cover pool assets by either selling these or through regular re- and prepayment of cover pool assets up until a pre-determined date, typically one year after the scheduled maturity date. Non-payment by this pre-determined date generally constitutes an event of default.
Statutory Over-Collateralisation	Amount or percentage of over-collateralisation as required by law or regulation in a given jurisdiction.
Swap	An agreement pursuant to which two counterparties agree to exchange one cash flow stream for another. These can include interest rate swaps, currency swaps, or swaps to change the maturities or yields of a bond portfolio.

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