

RATING METHODOLOGY

STRUCTURED COVERED BONDS

The logo for MARC Ratings Berhad, featuring the word "MARC" in a bold, red, serif font, centered between two horizontal blue lines.

OVERVIEW

Covered bonds are debt instruments secured against a pool of low-risk assets (commonly used assets in established markets are mortgage or public sector institution loans) to which the investor has a preferred claim in the event of an issuer default. Covered bonds are mostly issued directly from the balance sheet of an issuer. The issuer is typically an institution that is regulated and publicly supervised. In many European Union (EU) countries, the issuance of covered bonds is regulated by laws that define the criteria for eligible assets and various other specific requirements. In most cases, assets are earmarked as collateral for the outstanding covered bond and are kept in the balance sheet of the issuer but in separate cover pools. The legislation recognises the separation of the cover pool from the insolvency estate of the issuer. The history of covered bonds goes back to the first *Pfandbriefe* issued in Germany in 1769, followed by the first issuance of covered bonds in Denmark in 1797. No specific legal and regulatory frameworks exist in the United Kingdom (UK), so covered bonds are structured based on existing contract law provisions.

In some jurisdictions where legislation on covered bonds is absent, securitisation techniques have been applied to structure what is known as structured covered bonds. These structured covered bonds are secured against a pool of assets which have been legally separated from the issuer or originator, isolating the asset pool's exposure to default and

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insolvency of the issuer. This is unlike a normal secured bond whereby in the case of insolvency of the issuer, the liquidator of a borrower acts on the security in accordance to the law. Structured covered bonds are also “dual recourse” bonds with priority of recourse to a cover pool and the issuer, as opposed to asset-backed securities that are generally off-balance sheet non-recourse instruments. To the extent that claims of the covered bondholders are not satisfied out of liquidation proceeds of the cover pool, such claims will compete with the claims of the issuer’s unsecured creditors. The first structured covered bond was issued in the UK. Similar instruments have been constructed in jurisdictions where no covered bond law has been established, for example in the Netherlands and Canada. Closer to home, Kookmin Bank of Korea issued the first structured covered bond in Asia in 2009.

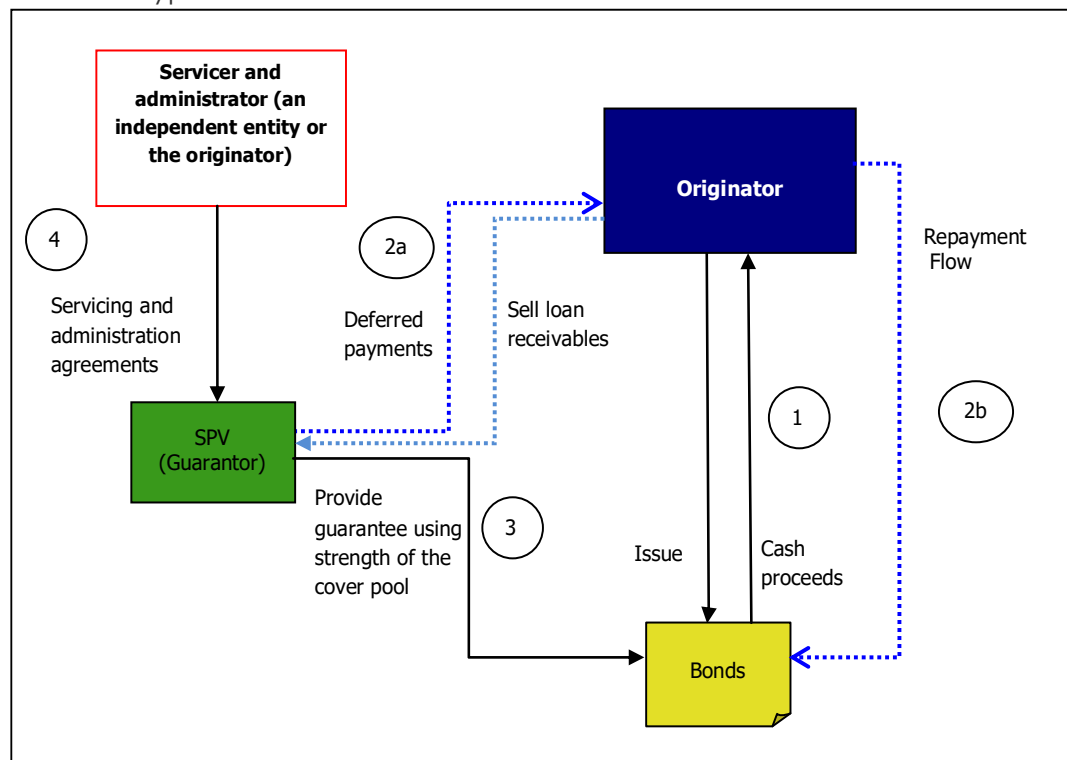
In Malaysia, covered bond structuring techniques have been applied to the financing of personal financing receivables. In common with covered bonds in other markets, the structured covered bonds are dual-recourse, with recourse to both the issuer and the cover pool should the issuer default. Personal financing covered bonds can differ significantly from traditional prime mortgage covered bonds in terms of credit quality and replacement risk. Owing to the peculiar characteristics of personal financing receivables, the cover pool is fairly dynamic, meaning that the originator often must replace non-performing receivables with performing receivables to ensure that the cover pool quality remains satisfactory. Strict eligibility criteria remain key to mitigating the replacement risk of a dynamic cover pool prior to originator insolvency and to achieving timely payment on the covered bonds post-originator default. Similar to the UK market, there is no specific legal and regulatory framework for covered bonds and the structure is based on contractual bond documentation.

In rating structured covered bonds, MARC Ratings looks at the credit strength of the issuer and cover pool, as well as the liquidity support for the transaction and the extent to which these factors mitigate asset-liability mismatches or issuer insolvency risk. Accordingly, the creditworthiness of the underlying cover pool and maturity mismatches between the cover assets and the bonds could limit the uplift above the originator in the case of personal financing receivables and loans which are not viewed as conventional covered bond collateral like prime mortgages. Our rating methodology also incorporates evaluations of the legal regime for security arrangements and other structural aspects of the transactions to assess the risk of disruption in an originator distress scenario.

TYPICAL TRANSACTION STRUCTURE

The typical transaction structure can be represented by the following diagram:

Exhibit 1: Typical transaction structure



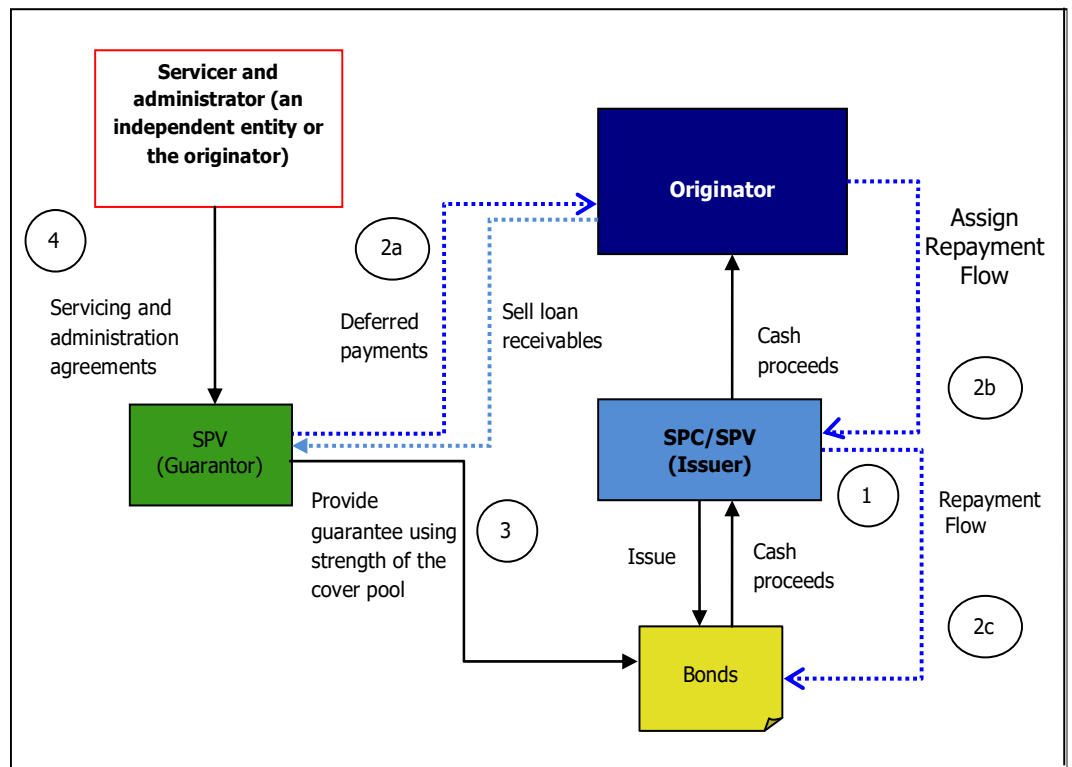
The mechanics can be described in the following steps:

- Step 1.** A structured covered bond will typically have an independent special purpose vehicle (SPV) which will hold the assets, known as the cover pool, while the issuer, which is normally the originator, will issue the structured covered bond as its own direct and unconditional obligation.
- Step 2.** The proceeds raised through the issue of covered bonds will be on-lent to an independent SPV. In turn, the SPV will use these proceeds to purchase from the originator portfolios of eligible assets/the cover pool on a true sale basis.
- 2a.** The SPV will repay the intercompany loan in deferred payments. The loan schedule will mirror the debt profile of the structured covered bond.
- 2b.** The deferred payments made will be the source of repayment for the covered bonds.

- Step 3.** Backed by the cover pool, the SPV will provide a guarantee to covered bondholders for the payment of interest and principal on the covered bonds, which becomes enforceable if the issuer defaults. The guarantee represents an irrevocable, direct and unconditional obligation of the SPV and is secured by the cover pool.
- Step 4.** The originator will act as the servicer under this structure. The originator usually also provides cash management services to the SPV and monitors compliance with imposed covenants. The servicer can also be an entity that is independent.

Alternatively, to overcome certain constraints, a newly created special purpose company may act as the issuer. This is illustrated in the following diagram:

Exhibit 2: Typical transaction structure – possible variant



There are only slight variations on this structure under Step 1 and Step 2. Step 3 and Step 4 of this variant are similar to the earlier structure. The mechanics for the first two steps are as follows:

- Step 1.** A special purpose company (SPC) or an SPV issues covered bonds as its direct and unconditional obligations. This SPC or SPV is often wholly owned by the originator.

- Step 2.** The proceeds raised through the issue of covered bonds will be on-lent to an independent SPV. In turn, the SPV will use these proceeds to purchase from the originator portfolios of eligible assets/the cover pool.
- 2a.** The SPV will repay the intercompany loan in deferred payments. The loan schedule will mirror the debt profile of the structured covered bond.
 - 2b.** The originator will assign the deferred payments received to the SPC/SPV.
 - 2c.** The SPC/SPV will utilise the monies to repay the covered bond obligations.

GENERAL RATING APPROACH TO STRUCTURED COVERED BONDS

Our rating approach for instruments following the principles of structured covered bonds includes a review of all sources of credit risks that may impair the particular bond's ability to repay in a timely manner all sums promised to investors. The review also includes an assessment of the degree of protection granted by security packages and legal and contractual provisions governing the issuer.

The credit quality of a covered bond is generally higher than that of the issuer's/originator's other debts. However, the credit risk of the covered bond is in some ways linked to the financial condition of the issuer/originator. This link exists as financial and operational links will almost always persist between a covered bond issuance and the rest of the issuer's/originator's operations. These links include the issuer's role as the servicer of the cover pool and the ability of the issuer/originator to originate new asset pools in transactions where there is an option for substitution or when there is a need to increase the overcollateralisation level if the cover pool credit quality deteriorates over time. Thus, MARC Ratings will evaluate if and when the issuer/originator has the willingness and the capacity to add protective measures if required. The investor also has the right to recover its dues from the issuer/originator. Notwithstanding these linkages, the covered bond is supposed to survive the default and insolvency of the issuer/originator because in the event of default of the issuer, the cover pool should be able to service the obligations, and it is therefore important to evaluate the credit quality of the cover pool.

Besides the credit strength of the issuer/originator and the cover pool, MARC Ratings will evaluate other potential risks that may impair the timely servicing of the covered bond. These include the level of segregation between the cover pool and the rest of the issuer's/originator's operations and how effectively this will hold during

times of stress, i.e. during issuer default and possibly insolvency. MARC Ratings will also take into consideration any additional structural features such as provision of a backup servicer, access to third-party liquidity, the presence of a repo counterparty in case the pool needs to be liquidated to pay the bondholders, the asset-liability matching between the cover pool and the structured covered bond, and the possibility of regulatory support.

Moving forward, MARC Ratings believes that there will eventually be an Islamic variant of a structured covered bond that may require extended credit rating evaluation. Nonetheless, the fundamental rating approach outlined in this criteria report would remain as the basis.

Our rating on covered bonds focuses on the following four major aspects:

1) Rating of the issuer/originator:

MARC Ratings considers the credit strength of the structured covered bond to be linked to that of the issuer/originator. Currently, existing domestic issuances of structured covered bonds have been directly issued by the originator and benefit from an unconditional and irrevocable guarantee by the special entity holding the cover pool. The cover pool backs the guarantee given to covered bond investors. The primary source of the timely payment of the covered bond will come from the issuer's operating cash flows. In the event the issuer stops making the payments on the covered bonds, the guarantee will be triggered and cash flows generated by the cover pool will be used to pay the interest and principal of the structured cover bonds. A lower-rated issuer has less ability than the higher-rated issuer in terms of providing liquidity support to the structured covered bond if the cover pool does not have sufficient cash flow to service the bonds.

2) Credit quality of the cover pool

In the event an issuer becomes insolvent, the most material source of payment to covered bond investors will be the cash flows of assets in the cover pool. MARC Ratings will apply its general rating approach to financial assets to assess the quality of the collateral in the cover pool. Typically, this analysis will include static data on the performance of a pool that is similar to the cover pool.

As further replenishment of the cover pool is a usual feature, the composition of a cover pool is generally subject to change over time. Thus, MARC Ratings will monitor the transition of pool quality, updating our view of the cover pool wherever possible by analysing its composition on a regular basis. In some cases, MARC Ratings will need to make suitable assumptions regarding the performance of these assets.

The evaluation of the cover pool will vary according to the type and risk profile of the asset (i.e. mortgage, hire purchase, personal loan, etc.) and will also depend on features such as salary deduction at source, presence of guarantors, the asset-liability matching profile and the quality of the database of the static or dynamic pools.

MARC Ratings will typically perform stress tests on the pool, including simulations or “what if” analyses. It will stress-test the delinquency, default and prepayment rates by multiples considered appropriate for that particular situation. It will also evaluate the level of correlation between the pool and the originator, so that the expected losses of the pool could be derived in the event of originator default.

From these evaluations, MARC Ratings can determine the levels of overcollateralisation required for the target rating.

Ongoing tests to be carried out on the pool

As mentioned earlier, the characteristics of the pool can change over a period of time as new assets may be added to the pool and the characteristics of the original loans in the cover pool may change (due to default, delinquency and prepayment). Thus, an overcollateralisation test may need to be performed on a regular basis. The robustness of the cash flows in terms of meeting the covered bond obligations is measured through performing a series of matching tests. In the matching tests, MARC Ratings looks at 1) the term of the cover pool against the term of the structured covered bond, as measured by the weighted average maturity; and 2) the net liquidity needs as measured by net liquidity needs of a covered bond within a near-term period.

- a) For issuers rated above AA-/MARC-2, the cover pool does not need to have an asset-liability match with the bonds.
- b) Issuers rated AA-/MARC-2 and lower that are still within investment grade ratings would be monitored; asset-liability mismatches should not be substantial and there should be a firm repayment plan for all obligations within the next 18 months (either from the cover pool or from the institution's other receivables).
- c) For non-investment grade issuers, MARC Ratings would generally need to be satisfied that the cover pool and liquidity facility combined will be able to pay all obligations of the bonds. MARC Ratings will perform stress tests and also take into consideration the flexibility of the repayment profile of the bonds, if any.

These matching requirements are considerably lower if the pool can be sold off and/or if there is third-party liquidity support to fulfill liquidity needs.

3) Asset-liability risk

Under a structured covered bond framework, the inherent probability of default is a result of possible insolvency of the issuer and asset-liability mismatch between the cover pool and the structured covered bond. Insolvency proceedings would normally temper the issuer's ability to perform its role as the servicer due to the lengthy legal process, hence causing temporary payment disruptions for the covered bond. The risk of non-payment could also emanate from deterioration of cover pool credit quality over time due to loan delinquencies and defaults.

This default probability could be substantially reduced by external liquidity support that will help the issuer avoid missing its payment obligations. Another method, which is more applicable when an issuer becomes insolvent, is to have an efficient backup servicing arrangement. Both risk mitigants may further enhance the credit rating of the structured covered bond.

For structured covered bond programme that feature an option to sell assets upon trigger events or events of default, MARC Ratings will evaluate the level of overcollateralisation needed and the terms of the sale such as the level of haircut, market spread and the related funding costs. However, MARC Ratings understands that the secondary market for loan pools is not very developed, especially in emerging markets such as Malaysia, and it may be quite difficult, if not impossible, to sell the pools.

Even if we assume that a pool can be sold, the discount that has to be applied will be difficult to ascertain as there is no data available on the trading of pool of loans. Thus, the only possible effective option is to have a committed buyer at a particular price for performing loans or a regulator as a possible repo counterparty. Highly rated repo counterparties will improve the rating of the structured covered bond.

4) Other possible risks to the bondholders

Legal & servicing

MARC Ratings seeks to understand the priority of claims in the case of an originator's insolvency. Clear understanding needs to be established on processes involved in cases of distress and to identify whether these events could lead to gaps in payment in case a receiver is appointed. As MARC Ratings would need to be satisfied that there are no other claims on the cover pool, it would need a true sale opinion from the representing lawyer in the transaction and reserves the right to obtain a legal opinion from a lawyer of its choice in addition to the representing lawyer.

At the onset, MARC Ratings would need to know of possible set-off claims by the obligors of the originators and what risk mitigants are in place to avoid the obligors having claims on the cover pool. In the event a receiver and manager is appointed for the originator/issuer, this transaction structure prevents the receiver and manager from disrupting the revenue stream generated by the cover pool during the receivership and liquidation processes in the originator/issuer.

In order to conclude that an originator's insolvency will not affect the servicing of the bond, MARC Ratings would need to be satisfied that cash flow disruptions are unlikely to occur and thus would need to determine in advance that the provision for a replacement servicer is in place. As IT-related issues can be quite critical in this area, MARC Ratings would assess how such issues would be addressed.

Taxation

The SPV will be an incorporated company which is subject to tax assessment. MARC Ratings would need to identify what kind of tax liabilities it is subject to and also how it may affect the various possible scenarios. MARC Ratings would obtain a tax opinion from a qualified tax advisor in this case.

Regulatory aspect

Covered bonds are usually a direct unsecured obligation of the issuer and thus the level of regulatory support the issuer receives has an effect on its stability. Moreover, regulatory support in terms of a provider of liquidity of last resort also plays a role in evaluating the credit quality of the obligation. This is especially so if the assets of the cover pool qualify as "repo-able" assets.

MARC Ratings is mindful that issuances may come from segments where the regulatory framework is still evolving. In this case, MARC Ratings would look at mechanisms that may be able to afford cash flow stability to the investor, irrespective of the regulatory framework. As these instruments are new to the market, the regulatory view on covered bonds is still in the early stage of development. Further developments in this area could form a very important part of the analysis. MARC Ratings will monitor regulatory developments and assess the impact on the rating accordingly.

References

- **MARC Ratings Analytical Insights on Frequently Asked Questions on Covered Bonds (March 2012)**
<https://www.marc.com.my/index.php/resources/more-about-resources/marc-analytical-insights/560-frequently-asked-questions-on-covered-bonds-march-2012/file>

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