

# Structured Finance Criteria

## Rating Criteria

### Scope and Limitation

Lianhe Ratings Global Limited (“Lianhe Global”) applies this structured finance criteria to transactions backed by assets including, but not limited to, consumer loan receivables, residential & commercial mortgage loans, trade receivables, corporate loans, as well as synthetic securitisations. The criteria outline and describe the rating process and procedure we undertake to evaluate both qualitative and quantitative factors when assigning ratings to structured finance transactions. The criteria are meant to provide a general guidance and shall not be interpreted as a rigid step-by-step methodology. We may make reasonable adjustments to reflect the unique features of each transaction. Furthermore, the criteria do not represent a comprehensive methodology but only address key rating factors.

### Rating Symbols

Lianhe Global applies the same rating definitions and symbols with a “(sf)” suffix attached such as A(sf) or BBB+(sf). The structured finance rating definitions and symbols carry the exact same meaning as those for general corporates, banks and non-bank financial institutions.

### Overview

In general, we focus on five key rating factors: (1) asset performance analysis, (2) counterparty risk review, (3) credit enhancement and cashflow analysis, (4) transaction structure analysis, and (5) legal aspect review.

### Asset Performance Analysis

In general, Lianhe Global analyses the credit quality of the assets underlying or referenced credits to gauge the asset performance.

For homogenous loan receivables such as asset-backed and mortgage-backed loans, Lianhe Global requires granular loan-level information to determine expected losses by applying statistical models as well as to analyse other collateral attributes. Additionally, Lianhe Global may rely on any available third-party due diligence report on the underlying assets to determine the accuracy of submitted loan-level data. While we typically use the statistical models to gauge default risk at deriving expected loss, we understand each issuer is unique in its own way which may not be fully captured by our statistical models. As a result, we also compare and contrast our statistical model outputs with an issuer’s historical static pool performance data which includes (where applicable) delinquency rate, charge-off rate, loss rate (and timing of loss), cumulative losses, repayment rate and prepayment rate etc. We take into consideration any change in (a) the issuer/originator’s underwriting guidelines over time, (b) economic cycles, (c) interest rate expectation, and (d) the servicer or asset manager’s capability etc. to make any qualitative adjustment.

For any asset pool with heterogeneous and/or concentrated large loans, Lianhe Global closely examines each individual loan/obligor’s credit attributes to determine its risk profile. We may request each individual loan/obligor’s detailed financial information where

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applicable. Lianhe Global may also rely on third-party assessments on these loans as we see fit.

In both cases, Lianhe Global assumes a base expected loss at single B for the life of a structured transaction. For any credit rating higher than the single B, we apply a multiplier or statistical approach best fitting the respective rating category of the asset type. The base expected loss and the corresponding loss multiples may also differ for various asset types. For homogeneous loan receivables, a multiplier-approach is applied. The base expected loss may differ from an issuer/originator's historical performance as Lianhe Global applies a forward-looking approach taking into account of aforementioned adjustment factors such as economic cycles and interest rate expectation etc.

## Counterparty Risk Review

First and foremost, Lianhe Global conducts reviews on counterparties participating in a structured finance transaction. In general, Lianhe Global reviews the financial and operation aspects of parties that provide asset/loan origination, servicing, loss mitigation, asset management, liquidity, custodian and trustee service, interest and currency hedging to the transaction, as well as credit enhancement either in the form of insurance, financial guarantees or standby bank letter of credit where applicable. These involved counterparties must be acceptable to Lianhe Global.

## Origination Review

Lianhe Global pays particular attention to the operation and financial aspects of the originators of receivables. We review their loan origination guidelines, regulatory compliance, channels, quality control, and prior repurchases (if applicable). We also examine the representations and warrants ("reps and warrants") made by the originators/sellers/sponsors which must be acceptable to Lianhe Global where applicable. In general, we only accept reps and warrants from a reputable entity. In an event a counterparty is not acceptable to Lianhe Global, we look for remediation schemes or backups or guarantees.

In general, the originator review process typically encompasses the following aspects:

- (a) Company's operating history and industry experience of management,
- (b) Financial condition of the company,
- (c) Underwriting guidelines, sourcing channel and quality control,
- (d) Legal and compliance, and
- (e) Technology and system integration.

## Servicing Review

Lianhe Global pays particular attention to the operation and financial aspects of the servicers of receivables. In an event a servicer is not acceptable to Lianhe Global, we may look to a backup or master servicer for support. We pay close attention to the compliance aspects of collection practices of a servicer which must follow the applicable local ordinance or laws. We also pay close attention to the default management and loss mitigation aspects. We believe that the length of time to foreclose/repossess and the amount of recovery are highly dependent on the jurisdictions, whether they are creditor- or debtor-friendly. Lianhe Global considers both the length of time and costs associated with asset recovery and disposal. We glance from the jurisdictions' historical foreclosure/repossession data and use them as

a benchmark. In the absence of historical performance data, Lianhe Global may use historical data from the other similar jurisdictions.

In general, the servicer review process typically encompasses the following aspects:

- (a) Company's operating history and industry experience of management,
- (b) Financial condition of the company,
- (c) Boarding and transfer of receivables,
- (d) Customer service,
- (e) Collection and compliance,
- (f) Default management, foreclosure/repossession and loss mitigation,
- (g) Investor reporting, and
- (h) Technology and system integration.

### Swap Counterparties

Lianhe Global reviews the financial aspect of swap counterparties that provide either currency or interest rate hedging to a rated transaction. We require financial covenants/thresholds that are acceptable to Lianhe Global. For swap providers that fail to meet our initial thresholds, we may ask them to post eligible collateral to the trusts/trustees. They may be subject to further collateral posting requirements if the swap exposure increase is not related to their creditworthiness. In an event a swap counterparty's creditworthiness has fallen below our minimum thresholds commensurate with the targeted structured finance ratings, sufficient remediations must be taken to cure the deficiency in a timely manner which may include third-party guarantees or replacement of the swap counterparty. These remediation measures must be acceptable to Lianhe Global.

### Other Counterparties

In general, any nominated trustee must be acceptable to Lianhe Global. In general, trustees are commercial or trust banks with strong financial strength and information systems that are conducive to the distribution of funds as prescribed in the governing documents. Trustees play an important role and they have a fiduciary duty to act in the best interest of the bondholders. In general, a trustee is not allowed to resign unless a replacement is in place.

### Credit Enhancement and Cashflow Analysis

In general, a senior-subordination structure is the most common type of credit enhancement in which principal repayment is allocated to the senior classes as a first priority in a sequential order while losses are allocated to the subordinated classes in a reverse order. As the senior classes amortize faster than the subordinated classes, the subordination or credit enhancement percentage increases over time.

In general, upon the satisfaction of certain performance-based triggers and lock-out period, a portion of the principal repayment is allocated to the subordinated classes in a pro rata order. Other common types of subordination include over-collateralization, excess spread, cash reserve account, third-party guaranty such as a guarantor, standby letter-of-credit etc.

Lianhe Global examines and simulates these various forms of credit enhancement against the related expected losses at various rating categories in order to assign the appropriate ratings. When excess spread is utilised, Lianhe Global conducts cashflow analysis in which we apply various interest rate, prepayment, and loss curve scenarios to ensure the

soundness of the proposed transaction structure commensurate with the respective proposed rating categories. We also conduct sensitivity tests by applying various front- or backend loaded loss curves along with various upward or downward interest vectors to examine the impact on available excess spread and loss coverages. In general, we expect excess spread would have significant impacts at the bottom of the capital structure due to less stressful scenarios. Whilst we apply more stressful interest and loss scenarios at the top of the capital structure, excess spread would likely to have minimum impacts. In certain downward interest rate scenarios, embedded hedges (i.e. interest collars or swaps) may cause leakages of excess spread which reduce available credit enhancement.

In cases where credit enhancement is provided by third-parties such as a letter-of-credit from a bank or financial guarantor, we will examine their financial strength and willingness to provide support which must be acceptable to Lianhe Global.

## Transaction Structure Analysis

### Operational and Financial Review of Counterparties

In general, prior to assigning ratings to a transaction for the first time, we will conduct an onsite visit of the originator, servicer, and asset manager (if applicable). On an annual basis, we will conduct a periodic review. All parties to a transaction must be acceptable to Lianhe Global. In an event a counterparty is not acceptable to Lianhe Global, we look for remediation schemes or backups or guarantees.

### Prefunding or Revolving Period

For transactions that have prefunding periods, revolving periods, substitution clauses and/or takeout events (by liquidity providers), we favour issuers to set up eligibility criteria and define takeout events at the start of the transactions. We conduct periodic surveillance to ensure the transactions are in compliance with their eligibility criteria.

During a prefunding period, where there is more liability than asset underlying a transaction, an issuer/sponsor must size an appropriate interest reserve account for the benefit of the trust to cover any potential interest shortfall. Also, during such prefunding and revolving period, an issuer must adhere to the eligibility criteria for any subsequent loan transfer.

### Commingling Risk, Segregated Accounts, and Permitted Investments

In a typical structured finance transaction, cash collections and disbursements are carried out by various parties such as a servicer and trustee. These parties may deposit cash collections earmarked for a particular structured finance transaction with their own funds or funds for other transactions, and thus this practice may be subject to commingling risk or automatic stay in an event of bankruptcy filing. Lianhe Global prefers transaction documents to set up segregated accounts for the benefit of the trusts. We allow commingling risk to the extent the parties are highly rated entities that are acceptable to Lianhe Global. In addition, we allow reinvestments of cash collections on deposit in highly liquid and rated instruments (permitted investments) that are acceptable to Lianhe Global.

### Set Off Risk

In a jurisdiction where a lending financial institution is allowed to offset an obligor's liabilities with his/her assets on deposit, we view this feature negatively and a transaction needs to have a reserve or other forms of credit enhancements to cover the set off amount.

### Other Considerations

In general, Lianhe Global relies on an issuer's legal counsel to provide legal comforts in regard to any tax liability implication related to a structured finance transaction.

Lianhe Global also prefers transaction documents to set up an annual cap on any extraordinary expenses that may be incurred by a trustee in an event of unconscionable lawsuits or other unanticipated expenses. This mechanism limits the amount of transaction cashflow leakage which may be detrimental to a structured finance transaction in which assets match liabilities (other than over-collateralization).

### Legal Aspect Review

Lianhe Global analyses the legal structure of structured finance transactions to ensure the underlying assets are segregated from the originators' balance sheet. This isolation of assets is achieved through a 'true sale' in which the assets are sold and transferred from the originators or sellers to special purpose vehicles ("SPV"). In an event of bankruptcy of the originators or sellers, these assets are not subject to automatic stay or clawback.

In general, the underlying assets must have free and clear titles assigned or sold to a trust underlying the transaction without recourse. We rely on an issuer counsel's true sale opinions (or similar legal opinions) for the perfected security interest underlying the transaction. We examine the contract (commercial), security and bankruptcy laws in place and their enforceability in a jurisdiction. We believe these legal aspects are the bedrock for structured finance transactions. We also look to the issuer counsel for any tax implication posed to the transaction which is not addressed by our ratings but may pose negative implications.

Additionally, Lianhe Global reviews the transaction features which include (but are not limited to) the waterfall payment priority, trigger mechanisms and thresholds for payment priority which may impact the level of credit enhancement in the underlying governing documents. Furthermore, we review consent and notification rights afforded to credit rating agencies.

Lianhe Global reviews the following transaction documents and covenants:

- True sales opinions
- Loan trust document or pooling and servicing agreement or sales and purchase agreement
- Sponsor/Originators acceptable to Lianhe Global
- Servicers (master/special/sub/backup servicer) acceptable to Lianhe Global
- Representations and warrants acceptable to Lianhe Global
- Commingling of funds subject to minimum rating thresholds
- Conveyance of titles to trustee subject to minimum rating thresholds
- Permitted investment
- Eligibility criteria
- Priority of payment



- Consent & notification rights of credit rating agencies that addresses material changes to the transaction such as priority of payment, change of servicers, and loan substitutions etc.
- Servicer termination events which includes both financial covenants and performance-based triggers
- Events of default
- Optional and mandatory clean-up call
- Swap documentation

### Surveillance

Lianhe Global conducts periodic surveillance to track rated structured finance transactions to ensure their performances are within our expectation and prescribed rating category thresholds. In general, we track rated transactions' delinquency, loss rate, cumulative losses, prepayment rate, repayment and steady state statistics etc. In addition, for transactions with prefunding and revolving features, we track the eligibility of subsequent collateral transfer.

In general, we conduct an annual review of key counterparties to ensure their financial and operating metrics are intact since the last review and they are acceptable to Lianhe Global. Lianhe Global may conduct unscheduled or ad-hoc counterparty reviews triggered by either an observed deterioration in operation and/or financial metrics of a counterparty or market-driven events.

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