Structured Finance Rating Criteria

Master Criteria

This criteria report updates and replaces the previous version, dated 28 October 2015

Scope and Limitations

The principles discussed are applicable to all SF asset classes, including residential and commercial mortgage-backed securities (RMBS and CMBS, respectively), asset-backed securities (ABS), and structured credit transactions. The criteria discussed herein provide an overarching framework applicable to all SF transactions and complement any detailed asset class-specific rating criteria published by Ind-Ra. Ind-Ra will expand or explain the inapplicability of any of these principles where appropriate in asset class-specific rating criteria reports.

Specific legal structure issues, asset quality (including portfolio and data adequacy), credit enhancement, financial structure or operational risks may prevent Ind-Ra from rating a transaction, or may limit the highest achievable ratings in the agency's analysis. The core areas where such restrictions may apply are generally those detailed in the report, Criteria for Rating Caps in Structured Finance Transactions, which is available at www.indiaratings.co.in.

Ind-Ra's rating analysis is based upon the prevailing relevant legal framework and generally does not address the impact of unforeseen changes to the law (including taxation related legislation). However, in certain cases where the relevant legal framework is subject to a high degree of uncertainty, Ind-Ra may apply a rating cap (as per the above referenced criteria). Changes to the law are analysed as credit events, as outlined in the Surveillance section of this report. The implementation of a previously unforeseen change in the law may lead to a change in the ratings of affected notes.

Key Rating Drivers

Legal Structure: The distinguishing feature of a SF transaction is the isolation, or "de-linking," of an underlying pool of assets from the corporate credit risk of the original owner, or "originator," of those assets. The aim is that the primary credit risk of the transaction relates to that of the pool of assets themselves, rather than the idiosyncratic credit risk of the originator.

Asset Isolation: Investors in structured finance (SF) transactions rely primarily on the underlying asset pool securing the transaction for repayment of interest and principal. The effective isolation of the assets from the credit risk of the corporate originator can allow SF securities to achieve a rating higher than that of the originator itself, if the securities are adequately protected from risk of loss at the originator level.

In certain cases, even though the asset is not isolated from the originator post settlement of the transaction, structural risk mitigants, including but not limited to cash reserve buffers and accelerated repayments in case of early default warning signals, may still help the SF securities achieve a rating that is a notch higher than the originator's rating.

Rating Analysis: To evaluate if investors will be fully repaid in accordance with the terms of the transaction, India Ratings and Research (Ind-Ra) focuses on five aspects fundamental to SF: legal structure; asset quality; credit enhancement; financial structure; and originator and servicer quality. All of these aspects are the principal elements that shape the credit profile of the transaction and, thereby, the determination of a rating opinion on the transaction.

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Asset Quality: Ind-Ra typically analyses the originator's historical portfolio-level performance to derive a loss expectation under a base case scenario. This is then adjusted according to the securitised assets' credit characteristics, since the assets are typically chosen as per specific criteria of the originators or the investors, and may not exactly be a replica of the overall portfolio of the originator across all credit parameters. This assumption is stressed further in each successive rating category, such that securities rated in the high investment-grade categories (i.e. 'IND AAA(SO)' and 'IND AA(SO)') have loss expectations that are consistent with low probability, high-severity stress scenarios.

Credit Enhancement: Credit enhancement is a key component in SF as it is the mechanism that provides bondholders with protection from expected losses on the underlying pool. The ratings for each bond reflect whether the bonds have sufficient credit enhancement available to withstand default given the expected losses on the underlying collateral pool (determined by Ind-Ra under the rating stress scenario associated with the relevant bond rating).

Financial Structure: As part of its assessment of the financial structure, Ind-Ra will analyse any counterparty dependencies, such as provision of derivatives, bank accounts, or financial guarantees, as these represent credit exposures beyond the securitised asset pool. Generally, SF transactions which are dependent on the credit quality of an underlying entity or guarantee provider are credit-linked to those entities, absent any structural mitigants.

Originator and Servicer Quality: The originator, servicer, and CDO asset manager as transaction participants can affect the performance of the underlying assets and, ultimately, the SF transaction. Ind-Ra's analytical team conducts management meetings, con-calls and site visit to review the operational processes for each originator, servicer, or asset manager participating in a SF transaction rated by Ind-Ra.

Surveillance: Once Ind-Ra assigns a rating, it monitors the transaction's performance through the agency's surveillance process, until the securities have been paid in full or the rating has been withdrawn. Of the five key rating factors outlined above; asset quality, credit enhancement, and originator and servicer quality often evolve over the term of a transaction. In contrast, legal structure and financial structure are usually stable and affected only by specific events.

Legal Structure

- Ind-Ra will review the transaction documents. Legal opinions are expected to address the legal aspects of the transaction, including that the transaction documents are legal, valid, binding, and enforceable.

The distinguishing feature of a SF transaction is the isolation, or "de-linking," of an underlying pool of assets from the corporate credit risk of the original owner, or "originator," of those assets. The aim is that the primary credit risk of the transaction relates to that of the pool of assets themselves rather than the idiosyncratic credit risk of the originator. This is typically achieved in SF by the sale of an identifiable and specific pool of the originator's assets, either directly or indirectly, to a special purpose vehicle (SPV) so that neither the assets nor their proceeds will be consolidated as part of the bankruptcy estate of the originator/seller in the event of its insolvency.

The SPV typically issues debt and uses proceeds of that issuance to acquire cash-generating assets. The SPV passes through cash it receives from the assets to pay interest on the debt and, in most cases, to amortise (fully or partially) the SPV's debt.

SPVs are often described as "bankruptcy remote" in that the risk of the transaction being disrupted by the bankruptcy of the SPV is rendered a remote risk through various structural features. Legal restrictions on an SPV limit the business activities it is allowed to undertake. Therefore, the transaction is protected as far as possible from credit risks posed by any ancillary activities that an SPV could otherwise undertake unrelated to the transaction. Unlike the originator of the underlying pool of assets being securitised, SPVs are not intended to be operating businesses and, therefore, should not, for example, be able to assume debt other than rated debt or subordinated debt. As their name suggests, SPVs are typically established for a specific and limited purpose, namely for issuing the SF notes, and have a separate and independent legal existence from their parents. Thus, the SPV provides improved predictability of outcome relative to corporate credit, as the risk factors associated with a SF transaction are confined primarily to the asset pool transferred to the SPV.

Ind-Ra expects the SPV to have sufficient support from operational counterparties, notably the note trustee and/or the security trustee, to enable it to operate on a day-to-day basis and particularly in a crisis. The agency expects the responsibilities of the operational counterparties to be clearly defined in the transaction documentation and the counterparties to have the powers to be able to effectively address issues that may arise, thereby minimising the risk of transaction disruption.

Ind-Ra is asked to consider assigning ratings to a variety of transactions using many different legal forms of SPV. The legal form of organisation will be determined and regulated by local law in the jurisdiction where the SPV was created. Typically, an SPV in a SF transaction is a limited liability company, a trust, limited liability partnership, or other form of body corporate (depending on the local law in the place of establishment).

Legal Opinion and Transaction Document Review

The SPV formation documents, the documents relating to a particular transaction, and associated legal opinions are key in assessing the extent of the separation of the assets from bankruptcy risk of the originator and the robustness of the structure of a particular transaction and, consequently, whether the transaction will operate as envisaged.

Ind-Ra analysts will review key transaction documents to determine whether they reflect the transaction and its structure as represented to Ind-Ra. Analysts may ask questions about the contents of these documents or explain the impact on the rating analysis of certain provisions in these documents. However, analysts will not make proposals or recommendations regarding the design of SF products that Ind-Ra rates or the content of transaction documents.

Ind-Ra expects to receive copies of legal opinions issued by transaction counsel covering the laws: of the jurisdiction where each relevant SPV and each other transaction party is formed/incorporated; governing the transaction documents; and governing the assets (which would cover the enforceability of the asset sale). It should be noted that any or all of the relevant laws may be different; Ind-Ra would expect legal opinions to cover all relevant laws.

Ind-Ra will review the legal opinions and expects them to address the legal aspects of the transaction. The agency would not expect to see a blanket insolvency carve-out to these opinions; to the extent that the insolvency of any person could have an impact on the opinions, Ind-Ra would expect that impact to be identified and described by transaction counsel.

Legal opinions are expected to address the nature of the various transfers in the transaction and provide assurance that the assets transferred to the SPV (i) are not subject to be recovered or “clawed back” by the seller of the assets in the event of the insolvency of the seller of such assets to the SPV, and (ii) will not be consolidated with the assets of the parent of the SPV in the event of its insolvency. Ind-Ra also receives opinions that address the perfection of transfers of assets (whether as a sale or grant of a security interest) between the transferors and transferees, including but not limited to the security interest in favor of the indenture trustee.

Ind-Ra reviews general corporate and enforceability opinions stating that the duties, obligations and agreements executed by the issuer are valid and binding, and enforceable against the issuer in accordance with their terms. In certain cases, as per the need, Ind-Ra expects to receive tax opinions confirming that there will not be any tax leakage from the structure or, if there are taxes, quantifying that amount so that it can be factored into Ind-Ra's analysis of the cash flows. If taxation practices are under review and no conclusive opinion is received, Ind-Ra will highlight it in its rating report. Ind-Ra will typically look for certain key aspects while analysing a legal opinion, including but not limited to "true sale" of assets from originator to a trust to ensure bankruptcy remoteness as discussed earlier, and enforceability of executed documents for the transaction.

To the extent transaction counsel cannot provide an acceptable opinion on any point, Ind-Ra expects such counsel to identify and explain adequately any residual legal risks, so that, to the extent relevant, these risks can be factored into Ind-Ra's credit analysis. Unlike operating companies, SPVs are restricted by their formation and transaction documents and do not have the ability to borrow or raise capital to remedy cash flow shortfalls or asset, security, or transaction structural problems. It could be the case that residual legal risk or risks make it impossible for Ind-Ra to rate the relevant securities.

Asset Quality

Asset Classes

SF transactions are collateralised by a broad spectrum of financial assets. Mortgage loans secured by residential and commercial properties, consumer assets such as credit card receivables and auto loans, and corporate loans and securities are the most common assets that are securitised. Ind-Ra broadly classifies SF transactions into four main sectors: RMBS, CMBS, ABS, and structured credit. Within these sectors, there is a variety of subsectors; for example, the ABS sector encompasses consumer (e.g. auto loans, credit cards, and student loans, among others) and commercial assets (aircraft leases, franchise loans, and corporate-linked future flows, among others), as well as asset-backed commercial paper (ABCP) conduits.

Default and Loss Analysis

- Ind-Ra typically analyses credit characteristics to derive a loss expectation that reflects a highly probable outcome if conditions remain within current expectations, commonly referred to as the base case scenario.

Repayment of principal and interest on the underlying loans and collateral are used to service and repay the rated notes in SF transactions. Ind-Ra typically analyses the originator's historical portfolio-level delinquency performance for an acceptable level of business vintage to derive a loss expectation under a scenario that reflects Ind-Ra's current macroeconomic expectations. This is commonly referred to as the base case scenario. The same is then adjusted according to the securitised assets' credit characteristics, The base case scenario describes expected asset losses only, without reflecting potential loss-reducing structural features of the transaction, which are expected to remain unchanged during the tenure of the transaction. Ind-Ra's opinions regarding base case loss expectations are typically validated by a rating committee based on values derived by one of the approaches listed below.

Assigning a default probability and loss severity to each individual loan based on loan-level characteristics using the output of analytical models developed by Ind-Ra as a basis for committee discussion. The underlying pool's loss rate is calculated using default models. This approach is typically used in the analysis of RMBS and CMBS multiborrower transactions.

- Analysing the asset portfolio based on the originators' historical performance for a rating committee to validate an expected loss. This approach is often used in the rating of consumer ABS transactions
- Estimating the aggregate portfolio loss rate using Monte Carlo simulation, i.e. a large number of repetitions of a stochastic process that seeks to describe the underlying portfolio credit risk behaviour. This approach is used in Ind-Ra models for correlated portfolios of corporate exposures and typically used in sectors such as CDOs and CMBS Individual simulation models may incorporate separate adjustments or stresses. For example, the CMBS analysis often employs stressed values for rental income declines and capitalisation rates

In addition to deriving a base case, which generally corresponds to (or is marginally below) Ind-Ra's 'IND B(SO)' rating stress scenario, loss expectations are generated under increasingly severe assumptions. The loss expectation is higher for each successive rating category above 'IND B(SO)', such that securities rated in the high investment-grade categories (i.e. 'IND AAA(SO)' and 'IND AA(SO)') have loss expectations that are consistent with low probability, high-severity stress scenarios. Ind-Ra employs a forward-looking rating philosophy that seeks to take a “through the cycle” rating approach in the higher rating scenarios and an expectations-based approach at the lower rating scenarios; that is, at the higher rating scenarios, the loss assumptions are expected to reflect a remote stress scenario that stays stable over time, while the lower rating scenarios reflect assumptions that are more closely related with expectations of collateral performance formed at that time. Ind-Ra's 'IND AAA(SO)' and 'IND AA(SO)' ratings denote the lowest or very low default risk, and repayment capacity is unlikely to be adversely affected by foreseeable events.

Loss expectations at the higher rating categories are often expressed as a multiple of base case loss estimate. For instance, an asset pool may be expected to experience 2% losses in a base case scenario, but in an 'IND AAA(SO)' scenario, to arrive at the adequate level of credit protection in the form of external credit enhancement, the transaction may be expected to withstand losses that are 4.0 times(x) greater than the base case, or 8% of the collateral pool's balance.

- Certain SF transactions are not reliant on a diversified pool of assets; some may be credit-linked to underlying entities or guarantee providers, while others are backed by more concentrated pools.

While the majority of SF transactions are backed by a granular pool of assets, others are backed by more concentrated pools. Furthermore, some transactions are not fully reliant on a pool of assets for their credit quality but are credit-linked to underlying entities. In case of guarantee providers, the credit quality most certainly is linked to the credit rating of the originator. The asset quality of these transactions is typically derived from the rating of the underlying entity or guarantee provider. These underlying entities include single-name corporate entities, financial institutions, municipalities, sovereign entities, and financial guarantors.

Where structures are not backed by a single entity or a diversified pool of assets but have a concentrated pool with several large exposures, historical default data can become less relevant. This can also occur with formerly granular pools that become concentrated over time as they amortise approaching maturity. Ind-Ra will employ certain deterministic stresses to evaluate whether the pool is overly exposed to these large exposures' default risk. Many asset classes use concentration matrices that will default several of the large exposures within the pool. The number of defaulted exposures will depend on the rating level desired.

Data Adequacy

Ind-Ra’s SF rating criteria assumptions are derived with reference to data specified in sector-specific rating criteria. The adequacy of such sector-specific data will be described in the sector-specific rating criteria, as well as whether limitations in data adequacy have led to a rating cap in that sector.

As part of the transaction analysis, Ind-Ra expects to receive originator-specific historical performance data relevant to the securitised asset pool for a preferable period covering all phases of at least one economic cycle or five years, whichever is longer. If sufficient originator-specific information is not available, especially for entities that have begun operations in the recent past or have launched a product line recently and stabilised levels of delinquencies cannot be gauged from the limited vintage of operations, significant market-wide historical performance data covering at least the same timeframe may often provide proxy information. This would be the case, in particular, for asset classes where the originator information may provide a limited contribution to the expected asset performance (for example, assets originated for the syndicated loan market.

The proxy data may be data of other originators active in the same market or general industry-level data (in each case, the receivables that are the subject of the data should be similar in nature in terms of profile, as well as underwriting, origination and servicing standards). In limited cases, it might also include data available from different jurisdictions for similar asset classes, where the jurisdiction-specific aspects of the data can be addressed via reasonable adjustments.

Credit Enhancement

Credit enhancement is a key component in SF as it is the mechanism that provides investors with protection from losses on the underlying pool. Ind-Ra's ratings for each bond reflect whether the bonds have sufficient credit enhancement available to withstand default given losses on the underlying collateral pool that Ind-Ra expects under the rating stress scenario associated with the relevant bond rating. Credit enhancement can be sourced internally by means of subordination, excess spread, or overcollateralisation (O/C) or externally by a third-party provider in the form of a financial guarantee, the provision of a reserve fund account, external equity, or a combination of the above. Credit-linked SF transactions typically do not have additional credit enhancement; rather, the rating is dependent on the underlying entity or guarantee provider.

Subordination

In a simple two-class senior-subordinated (senior/sub) structure, the subordinated class provides credit enhancement to the senior class by having all losses on the asset pool allocated to it first until its balance is reduced to zero (assuming that the proceeds of the subordinated note were applied to purchase performing receivables). Typically, interest and principal due to the senior tranche is paid first, and whatever cash is remaining is paid to the subordinated tranche. A subordinated bond can be written down each month by an amount equal to realised losses on the underlying collateral or incur shortfalls if collections are insufficient to repay the full amount due. Senior bonds may achieve an 'IND AAA(SO)' rating if the size of the credit enhancement is consistent with Ind-Ra's loss expectation derived under its 'IND AAA(SO)' stress scenario and if the bond is able to make timely payments as per transaction documents.

SF transactions are often “tranched” into multiple senior/sub classes with ratings ranging from 'IND AAA(SO)' through 'IND B(SO)'. Losses are usually allocated in reverse sequential order starting with the most junior and lowest rated tranche. Protection for the junior tranche is usually provided either by O/C, excess spread, an unrated class that is allocated losses first until it is reduced to zero, or a cash reserve fund fully funded at closing (or with monthly excess spread) that will be utilised first to cover losses. The rating of the junior tranche reflects the adequacy of the total credit enhancement or other forms of protection given the loss scenarios for the rating category concerned. Generally, protection available for the most senior tranches reflects the credit enhancement available to the junior tranche, as well as the subordination of the junior tranche itself.

Excess Spread

- Transactions that do not immediately release unused excess spread or have reserve funds or O/C from closing will generally have smaller subordinated classes than those that have the release feature.

A given bond may be able to achieve a rating, even when the size and amount of the subordination available to the bond is smaller than Ind-Ra's loss expectations at the relevant stress level, if excess spread is also available to cover losses as an additional form of credit enhancement. Excess spread is the revenue remaining after all required payments to the bonds are made at the end of each payment date and is typically the difference between the net weighted average coupon (net WAC) on the asset pool on the one hand and the weighted average note rate of the bonds plus the transaction's senior expenses on the other. The amount of excess spread generated can be very substantial and used each payment period to distribute as principal to the bondholders in an amount up to the outstanding realised losses and/or delinquent amounts for that period on the underlying pool, depending on the terms and conditions of the transaction.

The value of excess spread in providing credit enhancement varies greatly across asset classes and structures and is highly dependent on the timing of defaults, charge-offs or losses, the rate of repayment on the underlying asset pool, and changes in interest rates. It is often only available on a “use it or lose it” basis, whereby excess cash is available but released to the payee at the bottom of the waterfall because no losses were realised in a given period; in this case, the credit enhancement value of this cash is zero. Alternatively, losses may occur in a period but no excess cash may be available to distribute as principal. If unused excess cash is released each period, rather than retained, or "trapped," in a reserve fund, default or loss timing becomes critical.

Principal repayment on the underlying asset pool is also critical in determining the credit enhancement benefit of excess spread. A fast rate of repayment can reduce the monthly amount of excess spread available to cover losses in the current and future periods. Excess spread may also decrease due to WAC compression, a decline in the amount of interest received on the collateral due to higher coupon assets repaying or defaulting at a faster pace than lower coupon collateral. Also, excess spread will decline if the bonds' note rate rises faster than the collateral's net WAC. For instance, a mismatch can occur when the note interest rate is based on a floating index while the underlying assets pay a fixed rate or as a structure deleverages.

Because these factors can directly and substantially affect the availability of excess spread, Ind-Ra performs a cash flow analysis for each SF asset class that utilises excess spread for credit enhancement. Asset class-specific, proprietary cash flow models as well as the assumptions Ind-Ra makes about the loss timing, repayment, interest rates, and other factors specific to each asset are used to analyse the availability of excess spread. The amount of excess spread available varies across originators and asset classes, under various stress scenarios. Published cash flow rating criteria and the assumptions made for each applicable asset type are available on Ind-Ra's Web site at www.indiaratings.co.in. Ind-Ra's published criteria for its interest rate assumptions on select countries are also available on its website.

Reserve Funds and Overcollateralisation

- While the amount of loss protection for a rated tranche provided by subordination, excess spread, or O/C is generally unaffected by the financial structure, the manner in which principal collected on the asset pool is distributed among bonds varies.

Some structures may use reserve funds or O/C as credit enhancement instead of or in addition to other forms described. Reserve funds may be funded at closing (for example via a cash deposit or subordinated loan). Similarly, O/C may be created at closing through a greater value of assets securing the transaction than rated notes issued (i.e. via an unrated junior or subordinated class). In some structures, excess spread is not released after each payment period after covering losses. Instead, the cash is used to fund (or top up) a reserve fund or pay down principal on the bonds. Remaining excess spread may be deposited in a cash reserve fund until it reaches a certain limit. Once the reserve fund reaches the targeted amount, unused excess spread is released from the deal. If the balance in the reserve fund falls below a targeted amount, excess spread is re-directed to replenish it.

Certain deals use the remaining excess spread after losses are paid to repay principal on the bonds. By using interest to repay principal, the outstanding bonds' principal balance declines more quickly than that of the underlying asset pool, creating extra collateral.

Third-Party Protection

SF transactions sometimes provide for credit enhancement to be provided by an external counterparty. Counterparties that provide loss protection will pay the SF bondholders the difference between principal and interest due on the underlying collateral and the actual cash received or the amount of realised losses. These payment obligations of the counterparty are critical to ensuring that SF bondholders are paid in full. Therefore, the rating opinion for SF transactions with third-party loss protection reflects the risks associated with counterparty exposure in addition to the core credit risks related to the underlying asset pool.

The main risk associated with an external source of credit enhancement is the dependency of the SF transaction on the payment obligations of the guarantor. This reliance on an external party compromises the isolation of the SF transaction from the idiosyncratic risks associated with a corporate guarantor. However, structural provisions are usually included in the SF transaction that are intended to minimise the dependency on and exposure to the credit quality of the counterparty. In the absence of such structural provisions, rating of the SF instrument may be capped at the rating of the external source of credit enhancement.

Where structural provisions included are not sufficient to isolate the transaction from a counterparty – and the credit enhancement provided by that counterparty is material to maintaining the rating – the transaction may become credit-dependent on the counterparty, such that the transaction rating will not be isolated from that of the counterparty. One example is financial guarantors that provide a so-called "monoline wrap." In such instances, there are no structural provisions to mitigate the financial guarantor exposure, and the transaction typically becomes credit-dependent on the counterparty.

Financial Structure

In senior/sub SF transactions, the senior classes have priority in payment of interest and principal over the subordinated class. However, the most senior class, typically the 'IND AAA(SO)' rated tranche, is often split into multiple bonds with varying maturities or payment schedules. While the amount of loss protection for a rated tranche provided by subordination, excess spread, or O/C is generally unaffected by the financial structure, the manner in which principal collected on the asset pool is distributed among bonds varies.

Below is a brief description of the most common types of structures found in SF transactions. Cash flow modelling will reflect the specific structure of the transaction concerned in assessing the adequacy of credit enhancement at each rating level. Cash flow criteria may include a number of stress assumptions that are applied at different rating levels. Stresses may include, but are not limited to:

- high and low prepayment stresses;
- asset coupon compression to stress revenue levels;
- front- or back-loaded (or other) timings for when defaults and losses occur;
- interest rate stresses to assess the materiality of unhedged exposures, as well as carrying costs associated with defaulted assets;

The extent and nature of cash flow stresses adopted will depend on the asset class and type involved and the financial structure of the transaction concerned.

Pro Rata Pay Bonds

In a pro rata pay structure, interest and principal collections on the pool are distributed proportionately to each tranche based on its outstanding balance. To illustrate, in a 90%/10% senior/sub structure, 90% of all payments due on the collateral are distributed to the senior class and 10% to the subordinated class. Some asset sectors provide for all unscheduled principal, such as prepayments and the balance of defaulted loans plus realised losses, to be paid fully to the senior tranche while the subordinated classes are only allocated a proportion of scheduled principal collections. In these structures, the subordinated classes are "locked out" from receiving unscheduled principal collections.

Sequential-Pay Bonds

Sequential-pay structures provide for principal amounts to be paid to bonds based on a sequential basis, i.e. the most senior bonds are repaid first. Also, credit tranches may be divided into sequential-pay bonds that are repaid based on their stated maturity dates, whereby the earliest maturing bond is paid the entire amount of its tranche's share of principal collections until its balance is reduced to zero. Bonds that initially start out pro rata pay may flip to a sequential-pay basis upon breaching certain triggers, which are often based on performance of the underlying collateral.

By diverting all unscheduled principal to the senior tranche, its balance is reduced disproportionately faster relative to the subordinated class, which causes the subordination percentage to increase. This lockout feature, which is usually fixed for several years, is designed to protect the senior tranche from losses due to back-ended collateral defaults or adverse selection. Back-ended default may occur if the transaction enters a stressful environment in the later stages of its life. Adverse selection occurs when the strongest credit quality collateral prepays early and the seasoned pool mostly comprises weaker, more risky credits.

Bullet Classes

Bonds with bullet maturities only receive interest on each payment period and do not receive periodic principal distributions. Rather, principal on the bonds is paid in a lump sum at the expected maturity date, similar to a corporate bond, or over a timeframe of six to 12 months prior to its expected maturity. Often, during the period in which only interest is paid, referred to as the revolving period, collections received on the underlying collateral are reinvested in new receivables. The revolving period is for a predetermined time, depending on the underlying asset class. SF transactions with revolving periods usually are backed by revolving assets such as credit card receivables, dealer floorplan loans, and home equity lines of credit but can also be seen with longer term assets, such as residential mortgages.

At a specified period, often the end of the revolving period, principal begins to accumulate in an account or is paid to the bonds based on a predetermined amortisation schedule. Certain occurrences, such as a sharp deterioration in collateral performance, low prepayments, or the inability to reinvest and maintain a receivable balance, can trigger an early amortisation event where principal begins to be accumulated or distributed prior to the scheduled accumulation or expected maturity date. While repayment in full is typically based on an expected maturity date, Ind-Ra's rating addresses full repayment of principal by the stated legal final maturity, which can often be several years after the expected maturity date. Ind-Ra's rating analysis assesses if the distribution of interest and principal proceeds, including recoveries after working out defaulted assets, will be sufficient to repay the notes by the legal final maturity.

For all types of financial structures, Ind-Ra will apply the cash flow criteria for the specific asset class in question where relevant. For example, the criteria may specify scenarios involving varying prepayment speeds where a slow prepayment speed stress is applied to determine if a shorter pay bond with a legal final maturity earlier than that of the underlying assets will be repaid in full at its maturity. Similar stresses would test the ability of structures to accumulate sufficient principal funds to be able to meet bullet repayments by their legal final maturity. Ind-Ra also assesses if the legal final maturity date provides sufficient time needed for loans to be worked out beyond the expected maturity date. Similarly, bonds that pay pro rata will be tested in accordance with asset class criteria to assess whether credit enhancement will remain sufficient in the later stages of a transaction when the portfolio has amortised significantly, such that issues of asset concentration or adverse selection may arise in the portfolio.

Counterparty Risk

As part of its assessment of financial structure, Ind-Ra will analyse any counterparty dependencies — such as the bank accounts, or financial guarantees — as these represent credit exposures beyond the securitised asset pool.

Generally, SF transactions which are dependent on the credit quality of an underlying entity or guarantee provider are credit-linked to those entities (in the absence of any structural mitigants).

Originator, Servicer and Asset Manager Reviews

- Ind-Ra's rating analysts review the processes of each originator, servicer, or asset manager participating in a SF transaction rated by Ind-Ra.

The originator, servicer and CDO asset manager as transaction participants can affect the performance of the underlying assets and, ultimately, the SF transaction. Ind-Ra's operational risk, funds and asset manager teams, or asset-specific rating analysts review the operational processes for each originator, servicer, or asset manager participating in a SF transaction rated by Ind-Ra. Whether indicated by an internal score, opinion, or public rating, the assessment may lead to adjustments to a transaction's base case expected loss and credit enhancement levels or application of a rating cap. Ind-Ra's originator, servicer, and asset manager review criteria are published as part of the respective asset sector criteria reports or as separate criteria, which are available on Ind-Ra's Web site at www.indiaratings.co.in.

Originator Reviews

- In general, Ind-Ra expects an originator/SF issuer to have sufficient operating experience in the relevant market and in originating the product comprising the asset pool.

Ind-Ra assesses the risks associated with the originator's products, programs, and underwriting guidelines, including those risks embedded in less stringent and aggressive origination practices and controls, since these assets will have a greater propensity to underperform those assets originated under more stringent guidelines and controls. The review looks to assess whether collateral from an originator is likely to perform in line with, better, or worse than collateral from other originators in its peer group in times of stress. Propensity for better performance may be indicated by the quality of origination controls and the use of best practices. The quality of the originator's practices and controls will also be of particular importance in revolving transactions, where receivables that are to be originated in the future will be sold into the transaction using principal repayments on the existing portfolio.

For certain asset classes, and as deemed appropriate before or even after transaction closing as an ongoing process (as stated in sector-specific criteria), Ind-Ra will complete file review, of a small number of loan accounts, as part of the originator review. The purpose of the review is to provide an example of the origination and underwriting processes and to cross-check data provided in the portfolio data files. Such file reviews are typically very limited in terms of scope and sample size. For example, a review may consist of Ind-Ra selecting 10 loan accounts from a list of those expected to be included within the securitisation transaction. Ind-Ra will then review the originator’s physical and/or electronic records of the selected accounts. Any inconsistencies identified (e.g. between paper and electronic files, or between the described and observed processes) would be discussed with the originator and may be taken into account in the rating analysis, depending upon Ind-Ra’s opinion of the materiality of such inconsistencies.

In general, Ind-Ra expects an originator to have sufficient operating experience in the relevant market and originating the product comprising the asset pool. Ind-Ra also will expect the originator to provide historical performance data as well as historical loss severity and recovery data.

Servicer Reviews

- A servicer's internal control framework is of particular importance to Ind-Ra’s analysis as it demonstrates the servicer's commitment to sound operational business practices.

The primary responsibility of the servicer is to collect and distribute payments from the underlying assets to the trustee for the benefit of the bondholders. In certain SF sectors, servicers have additional responsibilities such as advancing delinquent loan payments and negotiating loan workouts. The servicer review and rating process is designed to identify and evaluate the quality of a servicer's loan administration and default management processes, compliance with stated guidelines, and operational and financial stability. The servicer rating process assesses the company's strategy for handling assets in various jurisdictions and conditions, procedures to stay informed on current legislation, and methods of integrating these changes into its loan servicing processes. In addition, a servicer's internal control framework is of particular importance to Ind-Ra as it demonstrates the servicer's commitment to sound operational business practices.

RMBS, CMBS, and ABS servicers may be assigned public servicer ratings. Ind-Ra maintains a detailed and specific scorecard incorporating its criteria for each servicing type. Each servicer rating is based on a select set of criteria, from which a composite score is derived. The score is based on a review of the servicer's corporate organisation, financial condition, staffing, procedures, and technological capabilities. Ind-Ra conducts servicer reviews for each servicer participating in a SF transaction it rates irrespective of whether the servicer is assigned a public servicer rating by Ind-Ra.

Surveillance

- Transactions are reviewed using the latest remittance reports and any other relevant information available.

Once Ind-Ra rates a SF transaction and if the ratings are not point in time it is assigned to Ind-Ra's asset sector surveillance group. Of the five key rating factors outlined in this report; asset quality, credit enhancement, and originator and servicer quality often evolve over the term of a transaction. Legal structure and financial structure in contrast are usually stable and affected only by specific events.

With respect to asset quality, credit enhancement and originator and servicer quality Ind-Ra monitors rated transactions using asset performance and cash remittance information supplied by servicers and trustees and any other relevant information. The surveillance process involves a number of quantitative and qualitative functions to assess the performance of rated tranches, including monitoring pool-level performance indicators, comparing current credit enhancement levels against forecast or stressed assumptions, assessing the impact of market developments on the performance of transactions, and loan-level analysis.

Ratings are reviewed at least annually by a rating committee. If a rating action appears warranted for reasons including reported transaction performance, Ind-Ra's asset performance outlook or the occurrence of a credit event, a committee review will be undertaken promptly. Rating actions for some transactions occur more frequently, particularly if performance of the underlying pool exhibits rapid deterioration.

Credit events are discrete developments that may affect the rating analysis of certain transactions. Examples of credit events include: a reduction in the rating of a counterparty; a change to the underlying legal framework; a transaction document amendment; or any other event on a case-by-case basis thought to have a material credit impact. Upon Ind-Ra observing or being notified of any such event, the agency will consider the extent to which the rating analysis may be impacted.

In respect of potentially material events, Ind-Ra will convene a rating committee to review the impact of such event upon the relevant ratings. To the extent that the event is not expected to have an impact on ratings, Ind-Ra may publish a non-rating action commentary (NRAC) with a description of the event, the relevant ratings and the rationale behind Ind-Ra's analysis. The occurrence of such events will not in itself trigger a full committee review of a transaction; rather, the analysis will focus on the impact of the specific event.

Specific surveillance criteria may be published by individual asset groups to explain the process for that group's surveillance and any methodological aspects that are specific to the surveillance of the rating. For example, specific surveillance criteria may address the process for downgrade rating action for sectors that have experienced stress to explain how rating actions are taken. Published asset sector-specific surveillance criteria are available on Ind-Ra's Web site at www.indiaratings.co.in.

Rating Sensitivity Analysis

For each new rating, Ind-Ra completes rating sensitivity analysis. For public ratings, the analysis is published in the transaction presale and new issue reports. For each class of rated instruments, the analysis indicates the rating impact from the application of more stressful asset performance assumptions. For example, the sensitivity analysis may show that the rating of the Class A note would be expected to migrate to ‘IND A(SO)’ from ‘IND AAA(SO)’ if the base case default assumption is increased by 50%, and other factors are kept constant. The sensitivity analysis parameters are selected according to the key performance parameters of the relevant asset class and will include at least three stress assumption scenarios.

Reasonable Investigation

In issuing and maintaining its ratings, Ind-Ra relies on the factual information it receives from issuers and underwriters and from various third-party sources Ind-Ra believes to be credible. Ind-Ra conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of that information from independent sources (to the extent such sources are available for a given security or in a given jurisdiction).

Variations from Criteria

Ind-Ra's criteria are designed to be used in conjunction with experienced analytical judgment exercised through a committee process. The combination of transparent criteria, analytical judgment applied on a transaction-by-transaction or originator-by-originator basis, and full disclosure via rating commentary strengthens Fitch's rating process while assisting market participants in understanding the analysis behind our ratings.

A rating committee may adjust the application of these criteria to reflect the risks of a specific transaction or entity. Such adjustments are called variations. All variations will be disclosed in the respective rating action commentaries, including their impact on the rating where appropriate.

Issues Not Addressed by the Rating

There will always remain certain issues that are difficult to analyse, such as the risk of a vexatious challenge, the potential for a change in the legal or tax regime, and fraud. Issues such as these are not addressed in Ind-Ra's analysis, or in its rating opinion.