# Global Structured Finance Rating Criteria

## Master Rating Criteria

This report updates and replaces the Global Structured Finance Rating Criteria report published 26 October 2021.

## Scope

These criteria provide an overarching framework applicable to all new and existing structured finance (SF) transaction note ratings globally, including residential and commercial mortgage-backed securities (RMBS and CMBS, respectively), asset-backed securities (ABS) and structured credit ratings. Any detailed asset class-specific rating criteria published by Fitch Ratings should be considered in addition to these criteria.

## Key Rating Drivers

Each of the key rating drivers below is of equal importance for the analysis.

**Asset Isolation and Legal Structure:** SF transactions are structured to isolate, or "de-link," an underlying pool of assets from the corporate credit risk of the original owner, or "originator", of those assets. This is intended to ensure that the transaction's main credit risk relates to that of the pool of assets, rather than the idiosyncratic credit risk of the originator. In the absence of other factors, the effective isolation of the assets from the credit risk of the originator can allow SF securities to achieve a rating higher than that of the originator.

**Asset Quality:** Fitch analyses the assets' credit characteristics to derive a loss expectation under a base-case scenario. This assumption is stressed further in each successive rating category, so that securities rated in the high investment-grade categories (ie 'AAAsf' and 'AAsf') have loss expectations that are consistent with remote, high-severity stress scenarios.

**Financial Structure:** Credit enhancement and structural features are key considerations in the assessment of the financial structure. Fitch's rating for each bond reflects whether there is sufficient credit enhancement available to withstand potential losses given default on the underlying collateral pool in the relevant rating stress scenario. Fitch will analyse the structural features, including the bond repayment structure.

**Counterparty Risk:** Fitch's analysis relies on all SF counterparties having the operational knowledge and capability to perform the functions that they are contractually obliged to perform. Fitch analyses any counterparty dependencies, such as provisions for derivatives, bank accounts, or financial guarantees, as these represent operational exposures and/or credit exposures beyond the securitized asset pool.

If sufficient isolation from any material credit or operational risk introduced by a counterparty is not achieved, the SF bond's rating may not exceed that of the counterparty introducing that risk.

**Operational Review:** The originator, servicer and CDO asset manager, as transaction participants, can affect the performance of the underlying assets and, ultimately, the SF transaction. Where applicable, Fitch reviews the operational processes for each originator, servicer or asset manager participating in the rated SF transaction.

**Rating Caps:** Fitch may view certain characteristics of SF transactions to be incompatible with certain rating categories and therefore applies rating caps as described in *Appendix 4*.

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### Click Here for Rating Criteria Synopsis Video

Disclaimer: This synopsis video is a summary of the criteria report made for information purposes only. It does not replace any part of the criteria report and is to be used only as complimentary material.

## Limitations

Ratings, including Rating Watches and Outlooks, assigned by Fitch are subject to the limitations specified in Fitch's Ratings Definitions and available at https://www.fitchratings.com/site/definitions. In addition, ratings within the scope of these criteria are subject to the following specific limitations:

Fitch'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). 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 have an impact on assigned ratings. Where the relevant legal framework is not considered sufficiently robust, Fitch may apply a rating cap or may not assign a rating at any level (see a discussion of this and other reasons for capping and limiting ratings in *Appendix 4: Rating Caps and Limitations*).

Specifically regarding special-purpose vehicles (SPVs), Fitch's rating analysis does not address the risk of a vexatious or nuisance challenge, the potential for a change in the legal or tax regime and fraud.

Assessment of asset quality (including portfolio and data adequacy), robustness of financial structure, operational risks, sovereign dependency, counterparty aspects or specific legal structure issues may prevent Fitch 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 *Appendix 4: Rating Caps and Limitations* and in Fitch's *Structured Finance and Covered Bonds Country Risk Rating Criteria*.

## Asset Isolation and Legal Structure

In its analysis of new SF transactions, Fitch reviews whether the following principles are adequately integrated in the transaction structure.

The distinguishing feature of an 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", or "asset manager" 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. Except where and to the extent set out in the asset class-specific criteria, this is typically achieved in SF by the sale of an identifiable and specific pool of assets, either directly or indirectly, to an SPV so that neither the assets nor their proceeds will be clawed back as part of the insolvency estate of the originator or seller in the event of its insolvency.

The SPV typically issues debt and uses proceeds of that issuance to acquire cash-generating assets (or charged assets in the case of funded synthetic transactions). 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. An example of one exception to this is synthetic transactions that may not issue debt but provide for an unfunded exposure to reference assets (see *Appendix 5*).

SPVs are often described as "insolvency remote" in that the risk of the transaction being disrupted by the insolvency of the originator of the assets, or the parent of the SPV, is rendered a remote risk through various structural features. 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. 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.

As their name suggests, SPVs for SF transactions are established for a specific and limited purpose, namely for issuing the SF notes, and have a separate and independent legal existence from their parents. The SPV therefore provides improved predictability of outcome relative to corporate credit, as the risk factors associated with an SF transaction are confined primarily to the asset pool transferred to the SPV.

### Analysts

Alla Sirotic
+1 212 908 0732
alla.sirotic@fitchratings.com

**Global**
Rui Pereira
+1 212 908 0766
rui.pereira@fitchratings.com

**US and Latin America**
Maria Paula Moreno
+57 601 2413257
mariapaula.moreno@fitchratings.com

**Europe, Middle East and Africa**
Susanne Matern, CFA
+49 69 768076 237
susanne.matern@fitchratings.com

**Asia-Pacific**
Ben McCarthy
+61 2 8256 0388
ben.mccarthy@fitchratings.com

**Global Cross-Sector Structured Finance**
Gregory J. Kabance
+1 312 368 2052
gregory.kabance@fitchratings.com

### Related Criteria

Structured Finance and Covered Bonds Counterparty Rating Criteria (July 2022)

Structured Finance and Covered Bonds Counterparty Rating Criteria: Derivative Addendum (August 2022)

Structured Finance and Covered Bonds Country Risk Rating Criteria (February 2023)

Structured Finance and Covered Bonds Interest Rate Stresses Rating Criteria (December 2022)

New Asset SF Rating Criteria Addendum (March 2023)

Non-Performing Loan Securitisations Rating Criteria (December 2022)

Fitch assigns ratings to a variety of transactions using many different legal forms of SPVs. The legal form of organisation will be regulated by local law in the jurisdiction where the SPV was created and determined by the sponsor. An SPV in an SF transaction is typically 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). Fitch's analysis of insolvency remoteness and the principles applied are detailed in *Appendix 1* of this report.

This analysis will not be repeated during the life of the transaction unless any material change is identified.

### Legal Opinions and Transaction Documents

The SPV formation documents, the documents relating to a particular transaction, and associated legal opinions indicate the extent of the separation of the assets from insolvency risk of the seller and the robustness of the structure of a particular transaction and, consequently, the extent of de-linkage of the assets from the transferor and the SPV from affiliates.

Fitch analysts will review key transaction documents when assigning new ratings, to determine whether they reflect the transaction and its structure as represented to Fitch. Analysts may direct questions to the transaction sponsor or other transaction parties, and/or their counsel, about the contents of these documents or seek an explanation of the impact on the rating analysis of certain provisions in these documents.

Fitch expects legal opinions to address the following with respect to the enforceability of the transaction documents: (i) the laws of the jurisdiction(s) where each relevant SPV, and certain other transaction parties, are formed/incorporated; (ii) the laws governing the transaction documents; and (iii) the laws governing the transfer of the assets, except where and to the extent set out in the asset class-specific criteria.

It should be noted that any or all of the relevant laws may be different; and Fitch expects legal opinions to cover all relevant laws. This practice may vary for certain jurisdictions related to National Scale ratings. Except where and to the extent set out in the asset class-specific criteria, 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 or other controlling party upon the occurrence of the insolvency of such party (nor will the SPV itself be consolidated with such party in the event of that party's insolvency).

Except where and to the extent set out in the asset class-specific criteria, Fitch also expects opinions to address the enforceability (including in the event of insolvency of any of the relevant parties) of the transfer of related security interests, if any, between the transferors and transferees, including but not limited to, any security interest in favour of the indenture trustee or security trustee.

General corporate and enforceability opinions indicate that the duties and obligations imposed on, and the agreements executed by, the issuer and other relevant parties are valid and binding, and enforceable against the issuer (and such other parties) in accordance with their terms. Tax opinions or memoranda address the status of the issuer (and any other relevant parties) in the transaction and, in certain circumstances, indicate whether such entity will be liable for payment of taxes, and if so, quantifying such amounts. Legal opinions should also address other matters relevant to a particular asset class, as set forth in the criteria for such asset class.

To the extent transaction counsel cannot provide a "clean" opinion on a particular matter, Fitch expects such counsel to identify and explain the impact of such risks. It could be the case that residual legal risk(s) make it impossible for Fitch 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, unsecured loans and auto loans, and corporate loans and securities are the most common assets that are securitised. Fitch classifies SF transactions into four main sectors: RMBS, CMBS, ABS and Structured Credit. Within these sectors, there is a variety of subsectors, such as the ABS sector encompasses consumer (e.g. auto loans, credit cards, unsecured loans and student loans) and commercial assets (e.g. aircraft leases, franchise loans, and corporate-linked future flows), as well as asset-backed commercial paper (ABCP) conduits.

See Fitch sector-specific criteria and bespoke criteria available at www.fitchratings.com.

### Default and Loss Analysis

Repayment of principal and interest on the underlying loans and collateral are used to service and repay the rated notes in SF transactions. Fitch typically analyses the assets' credit characteristics to derive a loss expectation under a scenario that reflects Fitch's macroeconomic expectations. This is commonly referred to as the base-case or expected case scenario, and it is assessed at rating committees or in the preparation of sector-specific or bespoke criteria. The base-case scenario describes expected asset losses only, without reflecting potential loss-reducing structural features of the transaction. Fitch's opinions regarding base case loss expectations are considered by a rating committee, typically based on values derived by one of the approaches listed below.

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

- Assigning a default probability and loss severity or recovery rate to each individual loan based on loan-level characteristics using the output of rating models as a basis for committee discussion. The underlying pool's loss rate is calculated using default and loss severity or recovery rate models or loan loss models. This approach is typically used in the analysis of RMBS and US CMBS multi borrower transactions.
- Analysing the asset portfolio based on the originators' historical performance for a rating committee to derive an expected loss. This approach is often used in the rating of consumer ABS transactions.
- Assigning default probabilities and recovery rates on the basis of ratings, credit opinions or bank internal rating systems (for granular portfolios only) for individual assets. This approach is most commonly applied in structured credit transactions.

In addition to deriving a base case, loss expectations are generated under increasingly severe assumptions. The loss expectation is higher for each successive rating category above 'Bsf', such that securities are rated in the high investment-grade categories (i.e. 'AAAsf' and 'AAsf') only if they have sufficient credit enhancement to be insulated from loss expectations that are consistent with higher stress scenarios.

Fitch 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. Fitch's 'AAAsf' and 'AAsf' ratings denote the lowest or very low relative 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 the base case loss estimate. For instance, an asset pool may be expected to experience 2% losses in a base case scenario, but in a 'AAAsf' stress scenario, the collateral pool would be expected to withstand losses 5.0 times (x) greater than the base case, or 10% of the collateral pool's balance. If the base case then changed in line with expectations to 2.5% losses, the 'AAAsf' losses may not change as much as the 'Bsf' losses and, for some sectors, may remain near 10% as the multiple applied would decrease to 4.0x.

For granular asset classes with homogenous portfolios, such as RMBS and consumer ABS, Fitch applies deterministic multiples. For asset classes with less granular portfolios (but not single-asset or very concentrated large-loan pools) or portfolios that show sector concentration, Fitch applies additional stresses as per sector-specific criteria to determine the appropriate multiples for higher rating scenarios.

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.

As an example of the calibration of rating default assumptions within sector-specific criteria, the report *CLOs and Corporate CDOs Rating Criteria* outlines how Fitch calibrated its CDO methodology by benchmarking model outputs to peak observed default rates. Specifically, the default model was calibrated to reflect the view that CDO notes rated in the 'Asf' category and above should perform well in a stress with similar severity as the recession that generated the peak default rates, with little vulnerabiliy to default. In other words, the calibration was designed so that the protection afforded CDO notes rated in the 'Asf' category and above was at or above historical peak default rates.

While the majority of SF transactions are backed by a granular pool of assets, others are backed by more concentrated pools (for example, collateralised loan obligations and CMBS). Furthermore, some transactions are not fully reliant on a pool of assets for their credit quality but are credit-linked to underlying entities or guarantee providers. 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. Fitch 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 lead to Fitch assuming that one or several of the large exposures within the pool defaults. The number of defaulted exposures will depend on the rating level analysed.

While Fitch assigns long-term ratings to most SF notes, some SF ratings are assigned on a short-term scale. Where short-term ratings are assigned, Fitch either publishes specific criteria, for example, for asset-backed commercial paper, or uses assumptions for the short-term ratings that are in line with assumptions for the commensurate long-term ratings in its sector-specific or bespoke rating criteria. Which long-term rating stress is applied is based on the relationship between short- and long-term Fitch ratings for corporate and public finance. For cases where more than one long-term corporate or public finance rating is associated with a single short-term rating, Fitch applies the rating stresses associated with the highest long-term rating.

The sector-specific or bespoke criteria may include a specific treatment applied when short-term ratings are assigned.

## Data Adequacy

Fitch derives its SF rating criteria assumptions with reference to data specified in sector-specific or bespoke rating criteria. The adequacy of such data will also be described in the sector-specific or bespoke rating criteria along with any limitations in data adequacy that have led to a rating cap in that sector.

As part of the transaction analysis, where applicable, Fitch expects to receive originator-specific historical performance data relevant to the securitised asset pool for the longer of the following: (a) five years; and (b) a period covering all phases of at least one economic cycle. If sufficient originator-specific information is not available, 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).

Fitch performs a cash flow analysis to assess the financial structure, especially where derivatives are embedded or where there is a material reliance on excess interest.

# Financial Structure

## Credit Enhancement

Credit enhancement is a key component in SF as it is the mechanism that provides bondholders with protection from losses on the underlying pool. Fitch'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 Fitch expects under the rating stress scenario associated with the relevant bond rating. Credit enhancement can be sourced internally by means of subordination, excess interest, or overcollateralisation (OC) 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.

## Structural Features

Fitch's approach to analysing the various structures is described in asset-specific or cash flow criteria reports. Cash flow modelling will reflect the structure of the transaction concerned in assessing the adequacy of credit enhancement at each rating level. Fitch will generally customise the cash flow model to reflect any structural features that are not part of the base model. However, Fitch may not model certain structural features if the agency deems them to have an immaterial impact under the relevant ratings stress scenarios. Cash flow criteria 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, see Fitch's *Structured Finance and Covered Bonds Interest Rate Stresses Criteria*;
- basis risk stresses to assess unhedged exposures regarding different interest rate bases for assets and liabilities; and
- foreign-exchange stresses to assess exposures to unhedged currency risks.

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. For example, Fitch may adopt stresses tailored specifically to transactions where cash flows rely heavily on the terms and conditions of embedded derivatives.

Fitch's ratings of SF instruments typically address the likelihood of receiving payments in accordance with the terms and conditions of the notes, as described in transaction documents. The agency will thus model the different interest terms (i.e. interest deferral mechanisms) detailed in documents and analyse their impact. For details of instances where ratings may be assigned which do not reflect the terms and conditions of the notes, please refer to *Appendix 4: Rating Caps and Limitations*.

While repayment in full is typically based on an expected maturity date, Fitch's rating addresses full repayment of principal by the stated legal final maturity (plus any grace period allowed under the documentation), which can often be several years after the expected maturity date. Fitch'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' principal by the legal final maturity.

Where the notes are not structured to allow for interest deferrals or shortfalls and the notes do not receive their full interest on a specified payment date, Fitch will consider such notes as defaulted, and the ratings of the notes would be downgraded to 'Dsf' to register the default in Fitch's transition studies, unless the defaulted amount is considered immaterial to the rating opinion. For example, this could apply to a very small payment default as the result of a large one-off expense (see *Surveillance* below). The ratings of the notes may subsequently be raised from 'Dsf' to reflect future performance expectations for the notes where all defaulted interest has been fully repaid, and no interest deferrals are projected in the expected base case.

### Pro Rata Structures

Senior notes in SF transactions with pro rata pay structures are particularly sensitive to the timing and pace of any performance deterioration because funds that would have been used to build credit enhacement for senior notes are paid as principal for mezzanine or unrated liabilities.

Lower overall losses that occur later in the transaction's lifetime can therefore be more detrimental for senior noteholders than higher, front-loaded losses. Moreover, standard credit protection features may not shield senior notes as effectively from performance deterioration. For example, high excess spread may prolong pro rata periods, which could become more detrimental for senior notes if asset performance later deteriorated.

Pro rata structures can be hybrid or pure pro rata. Hybrid structures are more common than pure pro rata. Hybrid structures switch from pro rata to sequential payments and vice versa when certain triggers are breached and with the general aim of speeding up the senior notes payment when deal performance deteriorates. The effectiveness of protection for senior noteholders depends on the nature of these triggers, the timing of the trigger breach, how the triggers interact with other structural features (most notably the presence of a revolving period) and the characteristics of the asset portfolio as they they can evolve during amortisation.

To account for these risks, Fitch analyses the deal's specific tests and triggers considering stress scenarios for the relevant variables (eg prepayment speed, default distribution, excess spread availability, porfolio composition and pool performance during the revolving period with reference to the performance variables that drive the pro rata triggers) that may go beyond those specified in the applicable sector-specific criteria. In the absence of mitigants, the senior notes of a pro rata structure would need more credit support for the same rating as those in a sequential structure.

### Revolving Periods

SF transactions sometimes feature a revolving period, during which, for a specified period, principal collections are used to purchase additional assets, rather than to repay principal on the notes. Revolving periods expose noteholders to additional risk through a longer risk horizon, adverse movements in portfolio asset quality and origination standards, and increased defaults compared to a static portfolio.

Fitch will analyse structural mitigants to these risks, some of which Fitch has observed are performance-based early amortisation triggers and portfolio limits regarding certain characteristics (for example, average loan-to-value) which limit the extent to which a portfolio is permitted to evolve. Fitch will take such mitigants into account in its analysis. Due to the risks associated with revolving periods, Fitch expects them to be time-limited, with the length of the period dependent on the characteristics of the asset type being securitised. More detailed criteria with respect to asset types that typically see revolving periods in related transactions will be included in associated sector-level criteria. Fitch may decline to rate or may cap the maximum achievable rating of transactions with revolving periods that pose excessive risk (for example, very long revolving periods).

Master trusts are issuance vehicles with rolling revolving periods that issue multiple sets of liabilities from a single pool of assets. Fitch analyses them similarly to transactions with fixed revolving periods or warehouse facilities (see below).

### Warehouse Facilities

Warehouses are revolving structures and may be structured as a single-purpose facility or with rolling revolving periods. Fitch will analyse these structures similarly to structures with defined revolving periods by assuming that the portfolio will migrate towards the outer bounds allowed by the warehouse facility's eligibility criteria and portfolio parameters.

Single-purpose warehouse facilities are similar to transactions with defined revolving periods, while warehouses with rolling revolving periods can transfer receivables out of the facility, such as to another SF transaction, potentially leaving a concentrated portfolio. Fitch expects structural features, such as limits on weighted average and higher risk pool characteristics and limits that prevent concentration, to mitigate this risk.

### Maturity Risk

For all types of financial structures, Fitch 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.

Fitch 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.

### Representations and Warranties

SF transactions typically contain representations and warranties relating to the underlying assets (including those regarding ownership and title to the assets), as well as the organisation and status of key transaction participants. SF transactions also typically include enforcement mechanisms that are available for the benefit of investors to address a breach of a representation or warranty.

Fitch reviews the representations and warranties and enforcement (RW&E) mechanisms contained within a transaction and will typically publish the RW&Es available to investors which were disclosed in the transaction's offering documents and that relate to the underlying asset pool. Fitch will also publish a description of how the transaction's RW&Es differ from those typically seen for that asset class as highlighted in Representations, Warranties and Enforcement Mechanisms in Global Structured Finance Transactions (May 2016). Any deviations will be highlighted and the rating approach in relation to any omissions which present credit implications will be described.

Purchased pools often have RW&Es from the seller that are weaker than those typically seen for that asset class. In this case, further comfort may be taken by Fitch through extended legal due diligence, third-party file reviews (potentially conducted on a larger sample than is usual) or by applying more conservative asset assumptions.

### Investor Action

Fitch's rating analysis looks to legal final maturity. As such, Fitch assumes that investors will not exercise options or rights available to them that will cause a payment default or loss on a rated note, where Fitch's rating opinion expects that the rated note is capable of continuing to maturity without a payment default or loss arising. Examples include noteholder options to liquidate collateral or to receive alternative securities in settlement of the obligation, in lieu of cash. Similarly, where a note event of default occurs, if it is Fitch's rating opinion that the transaction would not suffer a default or loss in the event of the transaction continuing until maturity, then Fitch will assume in its analysis that rights to enforcement or acceleration will not be exercised.

Notwithstanding the above, there may be instances where investors vote to exercise an option to redeem all notes, which subsequently generates a loss on the rated par value of the notes.

Where the exercise of such options or rights is at the discretion of a senior class of noteholders over a subordinated class, Fitch will consider the potential impact of exercising such options or rights on the subordinated class when forming its rating opinion. Similarly, in the event that changes to the priority between noteholders would occur as a result of a note event of default and an acceleration of the notes, at such time Fitch will consider the potential impact of the change in priority in its rating analysis, where this could bring a relative advantage to a controlling class of noteholders over another class. In addition, transactions where a note event of default has been triggered and remains in force may become subject to a rating cap, where this is indicative of future performance uncertainty or volatility for the transaction.

## Counterparty Risk

All SF transactions include an element of reliance on counterparties, in the form of operational reliance, credit risk exposure or a combination of both.

Operational risks are a direct result of the counterparty's ability to perform specific operational functions, and can be vital to ensure timely payments to noteholders. Operational risks include asset pool servicing, transaction administration, and ancillary services, asset management, and allocation of available funds through the SF transaction's priority of payments.

Credit risk results from the SF transaction incurring a loss of cash flows due to a counterparty being unable to meet its financial obligations, or the counterparty losing transaction funds at the time of default. Examples of credit exposures include derivatives, liquidity facility providers and any entity holding transaction funds.

Fitch analyses any counterparty dependencies as these represent operational exposures and/or credit exposures beyond the securitized asset pool. If sufficient isolation from any material credit or operational risk introduced by a counterparty is not achieved, the SF bond's rating may not exceed that of the counterparty introducing that risk.

Fitch's operational risk teams or rating analysts review the processes of each originator, servicer, or asset manager participating in a Fitch-rated SF transaction.

For further details of Fitch's counterparty risk analysis, see *Structured Finance and Covered Bonds Counterparty Rating Criteria* and *Structured Finance and Covered Bonds Counterparty Rating Criteria – Derivative Addendum.*

## Operational Review

The originator, servicer and CDO asset manager as transaction participants can affect the performance of the underlying assets and, ultimately, the SF transaction. Where applicable, Fitch's rating analysts review the operational processes for each originator, servicer, or asset manager participating in a SF transaction rated by Fitch, when assigning new ratings.

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, an application of a rating cap, or cause Fitch to decline to rate a transaction. Where applicable, Fitch's originator, servicer, and asset manager review criteria are published as part of the respective sector-specific or bespoke criteria reports or as separate criteria. When relevant for transaction ratings, Fitch will carry out reviews of originators, servicers and asset managers under the surveillance process documented in sector-specific criteria.

Fitch assesses the risks associated with the originator's products, programmes, 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 than 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 (relative to expected performance for a portfolio with similar characteristics originated by a typical originator) 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 (see also *Revolving Periods* above).

For certain asset classes, Fitch will complete file reviews as part of the originator review process, in line with its sector-specific or bespoke criteria. The purpose of the review is to provide examples of the origination and underwriting processes for Fitch to better understand how the processes are performed 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 Fitch selecting 10 loan accounts from a list of those expected to be included within the securitisation transaction. Fitch will then review the originator's physical and/or electronic records of the selected accounts.

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

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 Fitch's opinion of the materiality of such inconsistencies.

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

When rating CLOs, Fitch reviews the asset manager to assess its operational ability to manage a CLO transaction, as explained in the CLOs and Corporate CDOs Rating Criteria.

### Servicer Reviews

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. Fitch's servicer review process is designed to identify and evaluate the quality of a servicer's loan administration and default management processes, compliance with stated guidelines, operational stability and in jurisdictions where servicer continuity is less certain, financial stability, when needed for the rating analysis.

The servicer review 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 Fitch as it demonstrates the servicer's commitment to sound operational business practices.

## Climate-Risk Assessment

In its analysis of new and existing SF transactions, Fitch may adjust key assumptions when the agency believes there is material exposure to direct or indirect climate-change risks.

Such considerations may reflect the demonstrable level of isolation or the exposure of the assets to longer-term physical climate-risk, or the potential materiality of climate-related transition risks affecting the performance drivers of SF transactions.

Fitch will provide public disclosures detailing any adjustments to assumptions outside of those specified in Fitch's sector-specific criteria, cross-sector and bespoke criteria, at www.fitchratings.com, in its Rating Action Commentaries, together with how they were considered in rating decisions.

## Surveillance

Once Fitch rates an SF transaction and if the ratings are not point in time, the transaction will be subject to surveillance. Of the key rating factors outlined in this report, asset quality, financial structure and operational risk often evolve over the term of a transaction. Asset isolation and legal structure in contrast, are usually stable, affected only by specific events and will not be reviewed as part of surveillance unless any material change is identified.

With respect to asset quality, financial structure and operational risk, Fitch 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, which may include 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. For operational risk, Fitch also reviews of originators, servicers and asset managers under the surveillance process documented in sector-specific criteria, when this is relevant for transaction ratings.

Monitored ratings are subject to regular scheduled reviews by a rating committee at least annually for international-scale ratings and in line with local regulation for national-scale ratings. If a rating action appears warranted for reasons including reported transaction performance, Fitch'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 material transaction document amendment; or any other event on a case-by-case basis thought to have a material credit impact. Upon Fitch observing or being notified of any such event, the agency will consider the extent to which the rating analysis may be affected.

In respect of potentially material events, Fitch will hold credit discussions on the event in question. To the extent that the event is not expected to have an impact on ratings or there is a rating committee outcome with no rating impact, Fitch may publish a non-rating action commentary (NRAC) with a description of the event and a confirmation that there is no rating impact. If the rating committee outcome is that there is rating impact, the resulting rating action will be published in a rating action commentary (RAC).

Under Fitch's surveillance analysis, notes that experience a very small payment default as the result of a large one-off expense for example may be considered non-material to the rating opinion (whether through a very small amount of interest deferral, or a principal loss that is not expected to recur). In Fitch's view, the recognition of such small amounts as a downgrade or default would not effectively reflect the substance of the notes' credit position where transactions have otherwise shown a strong credit profile throughout their lives.

Such instances are expected to be infrequent and the circumstances will be specific to each transaction. As a general rule, such instances would not be expected to exceed one month's cash flows owing to the rated security. Fitch derives its base-case loss expectations in consideration of the transaction's expected performance. If the transaction is not able to withstand Fitch's loss expectations, the agency will assess the evolution of asset quality, cash flow certainty and how much greater expected losses are compared to the transaction's current credit enhancement at each rating level, to determine which distressed rating to apply to a bond.

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

Sector-specific criteria reports do not usually address stress scenarios below 'Bsf'. Instead, Fitch makes projections of expected performance based on the current circumstances, without applying additional stress.

In addition, Fitch will take into account the likely occurrence of a DDE and the security's ability to meet its obligations in the near future. See *Appendix 3* for further details of Fitch's approach in determining DDEs. Fitch will assess the default likelihood of distressed bonds in accordance with its ratings definitions. Bonds that have already defaulted or experienced an irreversible principal write-down will be rated 'Dsf'. Further details of Fitch's Rating Definitions are available on its website.

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.

## Ratings Assigned to the Swap Oligations of SF SPVs

Fitch can assign a rating to a swap obligation of an SF SPV in line with the rating of a referenced note when the following conditions are met:

- The SPV's obligations to the swap counterparty are pari passu with the referenced note;
- The swap relates to a specific Fitch-rated note tranche from an issuer SPV or a structure-specific loan or term advance from a related SPV in a structure with a credit profile consistent with a rated note tranche from an issuer SPV;
- The notional amount of the swap equals the principal amount of the note to which it relates in the currency in which the note is denominated;
- Any amounts due to the swap counterparty, which are due at a level subordinated to the regular swap payments in the priority of payments, relate only to certain non-credit events (such as illegality, tax events, force majeure or other events beyond the control of either party) or to counterparty behaviour, which are not considered in the rating; and

- The terms and conditions for payment under the swap are reflective of those of the rated note to which the swap is attached and are no more onerous than those of the related notes.

Fitch considers the points above to confirm if the credit risk presented by the SPV to the swap counterparty is equal to the credit risk presented by the SPV to the referenced note. For a rating of a swap obligation that is the same as a specific note rating, if the rating of the referenced note changes, this will lead to an equal change in the rating of the SPV's swap obligation.

The ratings assigned to the swap obligations of an SPV are based on the swap counterparty performing under the swap and will be withdrawn if the swap agreement is terminated due to non-performance by the swap counterparty or due to a non-credit event. Fitch expects counterparty replacement upon downgrade below certain thresholds, which means non-performance by the counterparty is considered unlikely.

Fitch mainly applies these criteria to currency swap obligations because currency swaps tend to have a notional balance equal to the principal balance of the related note. Fitch has rated the interest-rate swap obligations of an SF SPV, but these types of ratings are not commonly applied to interest-rate swap obligations. This is because SF interest-rate swaps often do not have a notional balance in line with the principal balance of a specific note; in such cases this criteria could not be applied.

## Rating Assumption Sensitivity

For each new rating, Fitch completes a rating sensitivity analysis. For public ratings, the analysis is published in the transaction presale reports. For each class of rated note, the analysis indicates the rating impact from the application of more stressful asset assumptions. For example, the sensitivity analysis may show that the rating of the class A note would be expected to migrate to 'Asf' from 'AAAsf' if the base case default assumption is increased by 50%, and other factors are kept constant. For most transactions, the sensitivity analysis is based on model-implied ratings only and this is indicated in the relevant rating report. The sensitivity analysis parameters are selected according to the key performance parameters of the relevant asset class and are detailed in the related sector-specific or bespoke criteria.

## Reasonable Investigation

In issuing and maintaining its ratings, Fitch relies on the factual information it receives from issuers and underwriters and from various third-party sources Fitch believes to be credible. As part of the rating process for transactions initially rated and reviews completed from 1 December 2010, Fitch conducted and conducts a reasonable investigation of the factual information relied upon by it. This includes information from independent sources, to the extent such sources are available for a given security.

In case information cannot be verified to a satisfactory extent, Fitch will assess the materiality of the information to its rating analysis. If Fitch intends to rely on unverified information, and this information could materially affect the analytical outcome, Fitch will alter its assumptions or cap its ratings to reflect the increased uncertainty, or decline to rate (for a new rating) or withdraw existing ratings if Fitch believes the uncertainty cannot be appropriately reflected in the analysis.

Prior to 1 December 2010, Fitch did not typically conduct an investigation into the available information in the manner adopted thereafter. In particular, Fitch did not typically receive any verification of the information provided about the asset portfolio before the transaction closed. Nevertheless, as with all transactions under surveillance, Fitch has monitored the performance of the outstanding transactions that closed before 1 December 2010 and uses this extended record to check that the information relied upon for its initial analysis was sufficiently reliable. If the monitoring highlights inconsistencies between the reported asset performance and the agency's expectations given the operating environment, Fitch undertakes a further review of the quality of the data provided and seeks explanations for any material inconsistencies.

## Transactions Rated Solely Under Master Criteria

The master rating criteria may apply directly or be supplemented with sector-specific criteria or bespoke criteria. Where master criteria apply without sector-specific or bespoke criteria, the master criteria must address all rating drivers and key rating assumptions. Master criteria may also apply without sector-specific or bespoke criteria for national scale ratings if the number of Fitch-rated issuers within the sector is fewer than five.

Examples of where Fitch may apply the master criteria without sector-specific or bespoke criteria include event-driven rating confirmations that result in no rating impact, analysis of fully defeased transactions and transactions where only distressed ratings are outstanding.

## Variations from Criteria

Fitch'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 issuer-by-issuer 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.

A variation can be approved by a rating committee where the risk, feature or other factor and the methodology applied to it are both included within the scope of the criteria, but where the analysis described in the criteria needs to be modified to address factors specific to the particular transaction.

## Model Implied Rating (MIR)

A MIR is an output produced by a model that indicates or implies a credit rating and is used by a rating committee as one component of the credit rating analysis. This includes a model output that produces a letter credit rating or an indication that can be directly mapped, with little additional analysis, by a rating committee to a specific credit rating, such as when a rating-dependent minimum credit enhancement produced by the model can be compared to the actual available credit enhancement of the notes in SF transactions.

The MIR may reflect qualitative adjustments when those adjustments are integrated as model inputs in a manner consistent with published criteria. Model outputs can be constrained by rating caps, as described in applicable rating criteria. In such cases, the MIR is determined with consideration of the rating cap, regardless of whether the rating cap is encoded in the model output. If the rating cap is not encoded in the model output, the MIR is the lower of the model output and the rating cap.

## Applying Unforeseen Macroeconomic or Industry Developments to Criteria Assumptions

Fitch's rating criteria aim to consider a broad range of market conditions, including severe and low-probability economic and credit risk scenarios. However, when we project a more significant stress than what is included in the current criteria framework due to unforeseen macroeconomic or industry developments, we may need to adjust key assumptions to maintain prospective and timely ratings in certain sectors.

In such cases, analytical rating teams may perform an additional stress analysis using updated assumptions that reflect Fitch's view on new macro-economic or industry developments. Only affected key rating assumptions would be adjusted while all other elements of the criteria, including what are the key rating drivers and the mechanisms for how the criteria are applied, will remain unchanged. For sectors that rely on model-implied ratings, the model-implied ratings from both the assumptions under the criteria and the new stress assumptions will be considered in the rating decision. The new stress assumptions will be more severe than the base assumptions and can only lead to the same, or lower, ratings than the base assumptions.

Examples of when the additional stress analysis will be used to determine ratings include, but are not limited to catastrophic events, pandemics, significant changes to the regulatory or legal environment, and any unexpected developments that lead to a sudden and significant shift in projected consumer or industry behaviour.

Fitch will provide a public disclosure detailing the expected adjusted assumptions, which may be subject to change, at the beginning of a period that includes additional stress scenarios in its rating analysis. Rating action commentaries will disclose and describe the additional analysis and how it was considered in the rating decision. The period will end when the new stress assumptions are incorporated into the criteria or are no longer applied, which will be publicly disclosed.

## Criteria Disclosures

In the initial rating report or RAC, Fitch expects to disclose the following items, along with any relevant items specified in applicable cross-sector and/or sector-specific criteria:

- if market-wide data, rather than originator-specific data, is relied upon in the transaction analysis, as per *Data Adequacy* above, and this use is not covered in the sector-specific criteria;
- the credit implications of deviations from representations and warranties and enforcement mechanisms typically seen for that asset class, as per *Representations and Warranties* above; and
- any variations to criteria, as mentioned in the section *Variations from Criteria* above.

In a subsequent RAC related to surveillance actions, Fitch expects to disclose the following, along with any relevant items specified in applicable cross-sector and/or sector-specific criteria:

- any variations to criteria.

# Appendix 1: Special-Purpose Vehicles in SF Transactions

This appendix describes Fitch's expectations with respect to bankruptcy-remote SPVs used in SF transactions. The agency's analysis of the SPV is concerned primarily with the degree to which the assets have been isolated from the corporate credit risk of the originator and/or the SPV's owner and other affiliates. The means of achieving this may vary between jurisdictions, asset classes and structures, and references to SPVs herein should be understood to mean an insolvency-remote entity; such references should not be construed as having any accounting-related meaning.

Fitch's analysis will use the principles detailed below to determine the benefit a given SPV provides to a transaction. In following these principles, the analysis will consider the role each SPV plays in a given transaction – whether the SPV is the issuer, a borrower, an intermediate purchase company, or otherwise.

## Formation of an SPV

### *Type of Vehicle*

Fitch considers transactions with SPVs in many different legal forms. The legal form of organisation is not necessarily a determining factor in Fitch's assessment of the degree of risk; whether it is a determining factor will be assessed through the review of the characteristics of the SPV in the context of the overall transaction structure, the impact of the legal and tax regimes in the relevant jurisdictions and the purpose and role of the SPV in the structured finance transaction (i.e. issuer, borrower).

### *Operational History*

A newly formed SPV created for a specific securitisation transaction will, by definition, not be encumbered by any previous operating history. A newly established SPV has the benefit of a limited and known operating history and few creditors and liabilities at the outset of the transaction. For this reason, a new vehicle may have a reduced insolvency risk. Therefore, the creditors involved in the proposed transaction can – by agreeing to limitations on their individual rights to take bankruptcy or recovery action against the SPV or its assets – largely define the degree of insolvency risk of the SPV (see *Limited Recourse and Non-Petition Provisions* under the *Mitigating Factors* heading, below).

However, insolvency risk is also influenced by factors outside of the securitisation structure, such as the applicable legal regime and its interpretation, and cannot be exclusively defined by contractual arrangements amongst the creditors.

An SPV that is not newly formed may achieve the same benefits for the transaction as one that is newly formed, if adequate structural and contractual provisions have been put in place to reduce or eliminate any impact of legacy transactions on the vehicle. If an SPV is not newly formed, Fitch will typically request substantial supporting evidence for its suitability for use in a structured finance transaction. For SPVs that are not newly formed, relevant considerations include:

Existing SPVs may achieve the same objectives for the structured finance transaction as a new SPV.

- information about the nature and extent of the SPV's historical business operations;
- the amount of actual and contingent liabilities and the identity of its existing and potential creditors (including any actual or contingent liabilities of the SPV that have arisen or may arise because of the group to which the SPV belongs);
- any material tax, litigation and/or other liabilities; and
- any information about the way in which the SPV has historically operated, which may mitigate any of the issues set out above.

Fitch expects the SPV to have independent existence and to operate independently of the SPV's owner and any other affiliates.

## Multi-Issuance SPVs

Sometimes a sponsor will prefer to use a multi-issuance (rather than a single issuance) vehicle. Where this is the case, Fitch will review the structure and documents to assess whether the multi-issuance SPV achieves materially the same protection for investors in its individual issuances as those investors could expect from investing in the same assets via a single issuance SPV. Certain issues Fitch will examine include the following:

- If there is effective legal segregation (or compartmentalisation) of particular pools of assets and cash flows for the group of transaction creditors of each series issuance, and if there is any risk of liabilities of one series (or compartment) attaching to the assets of another series (or compartment). This will include if any party involved in more than one series issuance of the same multi-issuer can set off its liabilities in respect of one series (or compartment) against a different series (or compartment).
- How effectively the segregation of assets and liabilities has been entrenched in the structure to ensure that no existing series (or compartment) can be prejudiced or impaired by the terms of issuance of any other series (or compartment).
- How the structure allocates responsibility for third-party liabilities (eg tax and administration and advisor fees incurred by the multi-issuer SPV) to see if the liabilities are adequately allocated between the individual issuances.
- Whether the structure provides for separate enforcement of security for individual note issuances and any impact this may have on other series (or compartments).
- The operational procedures established to separate the asset cash flows and to mitigate commingling risk in respect of different series issuances.

Some jurisdictions have passed specific legislation for the legal segregation of assets and liabilities, in respect of individual series issuances in a multi-issuance vehicle. In other jurisdictions, the legal segregation is effected by contract and/or trust law. In each instance, Fitch will review the effectiveness of the mechanisms used to achieve the legal segregation of assets and liabilities in respect of different series issuances in a structure. The relevant transaction documents are key to Fitch's review. Fitch also expects the transaction legal opinions to confirm the enforceability of the legal aspects of these mechanisms.

### *Separate Existence*

Fitch will consider not only whether an SPV has an independent legal existence, but also whether the SPV has the ability to operate independently of the SPV's owner and any other affiliates. In some jurisdictions, matters such as management and shareholder control, maintenance of its own accounts, books and records and advisors, arms-length terms for its place of business, separateness of its assets and funds and ability to operate independently of the originator and owner are among the factors considered in this assessment.

No single factor is in and of itself sufficient to determine whether the SPV has a separate existence. For example, the presence of independent management or directors does not guarantee that the SPV cannot become a bankrupt entity upon an insolvency filing of another related entity. Rather, Fitch will look for such an assessment to be supported by the full range of factors deemed relevant to support a separate existence in the relevant jurisdiction.

If the SPV cannot be considered to exist independently of all other parties – e.g. its parent or an affiliate – Fitch may decide that no instrument issued out of the SPV can be rated higher than the rating of the party on which the SPV is dependent.

### *"Orphaned" or Not*

SPVs may be (and in Europe commonly are) "orphaned", that is, not legally or beneficially owned or controlled by the originator of the securitised assets nor any other enterprise with an interest in those assets or the SPV. In such cases, the beneficial ownership of the SPV will often be held on trust for a charity by the immediate legal owner, which will often be a professional company specialising in the management of such vehicles and which performs the management duties for a fee.

There may be commercial, tax, structural or legal reasons for an SPV not to be orphaned. This may be the case where there are one or more intermediate SPVs in a structure through which note issuance proceeds and/or asset cash flows pass. In this case, Fitch will review the safeguards and any aspects which may compromise the separation of the SPV from its parent or sponsor.

When the SPV is part of a group of companies, risks arising from the use of a non-orphaned SPV include exposure of the SPV to group tax or employee pension liabilities, or the risk in some jurisdictions that a court may order the consolidation of the SPV's assets with those of its parent entity in the parent's insolvency proceedings. To the extent that those risks exist in a particular jurisdiction, Fitch expects those risks to be addressed.

A non-orphaned SPV may achieve the same benefits as an orphaned SPV where relevant mitigants (such as noteholder control and strong separateness provisions) are present and respected.

***Jurisdiction***

The choice of jurisdiction for the SPV can be influenced by many factors, not all related to mitigation of the risk of insolvency.

Tax considerations in the form of both potential liabilities and benefits for the relevant SPV, or in relation to payments received on the underlying assets, can often be significant elements affecting the choice of jurisdiction by the transaction parties for the establishment of an SPV. Whether any SPV in the structure is exposed to tax liabilities in its jurisdiction of creation, or whether taxes will be imposed to reduce the cash flows or other income or proceeds available from the underlying assets, will have a consequential impact on the ability of an SPV issuer to service its rated debt.

Low or no tax jurisdictions are often chosen as the place to establish the SPV to mitigate the tax risk. However, in cases where it is nevertheless (for other reasons) beneficial to establish the SPV in a jurisdiction that exposes the SPV to potential tax liabilities, Fitch will expect to receive information about the nature and amount of the potential tax liabilities that may be imposed, how such liabilities are calculated, and any structural considerations that may neutralise or mitigate their impact. Fitch will assess the impact of any potential tax liability on the transaction as part of the cash flow analysis.

## Limitations on Activities

Fitch expects restrictions to be in place in the transaction that will preserve the future independence of the SPV. It is also expected that these restrictions will limit the business the SPV may engage in to only what is necessary for it to perform its obligations under the transaction documents. This reduces the risk of new liabilities and creditors being created, which may adversely affect the transaction or the solvency or bankruptcy remoteness of the SPV. Fitch expects these restrictions to be maintained for the duration of the transaction.

Depending on the laws of the relevant jurisdiction in which the SPV has been established, restrictions on the SPV's business activities and transactions can be entrenched through the documents forming the SPV and/or through contractual restrictions in the transaction documents and, optimally, both. Fitch would expect such restrictions typically to include:

- prohibition of change of ownership;
- covenants to maintain a separate business existence;
- limited ability to amend the constitutional documents;
- restrictions on any asset dealings (beyond those necessary for the SPV to enter into and perform its obligations under the relevant structured finance transaction documents);
- narrowly defined objects and powers (to those necessary for the SPV to enter into and perform its obligations under the structured finance transaction documents);
- restricted powers of directors;
- no additional borrowings, finance raisings, guarantees, additional granting of security and the like (save in limited exceptional circumstances where debt is subordinated and the subordinated creditors have agreed to be subordinated to the existing structured financing);
- no operating business;
- no employees; and
- no commingling of assets with other parties.

Other limitations, in addition to the above, may be put in place for some structures. Fitch will always review the applicable limitations in their entirety.

Depending on the jurisdiction, other forms of legal comfort or mitigant may be present that preserve the independent ownership of the SPV (for example, where the ownership interest in the SPV is widely held).

### Limited Recourse and Non-Petition Provisions

As all the transaction creditors involved in a potential structured finance transaction are known and identifiable (the noteholders, security trustee, liquidity providers, swap counterparty, and any other party contracting directly with the SPV), they can (subject to any applicable legal restrictions) agree contractually in the transaction documents to limit their (individual) legal rights to take insolvency or other recovery action against the SPV or its assets.

The limitations that the transaction creditors typically agree to at closing are set forth in the limited recourse and non-petition provisions in the SPV formation documents and/or transaction documents. In agreeing that their secured debts are limited recourse, the transaction creditors agree to have recourse only to the assets of the SPV for repayment of the amounts owed to them.

Structured finance transactions typically limit creditors' rights through limited recourse and non-petition provisions.

Under the non-petition language, the transaction creditors waive their rights to sue the SPV individually and agree not to take any steps to "petition" a court to put the SPV into bankruptcy or other insolvency proceedings for non-payment of its debts to the creditor. In certain jurisdictions, an unlimited restriction on a creditor's right to take such action against the SPV may not be enforceable. In these instances, it is usual for creditors to agree a restriction that lasts for any applicable suspect period, plus a day after the issued debt is repaid.

Fitch expects transaction creditors to agree to limited recourse and non-petition covenants. In circumstances where a structure may not include limited recourse and/or non-petition covenants, or where there are restrictions on these covenants, Fitch will expect information as to the reasons for this (together with any structural mitigants). This will allow the agency to assess the risks to the SPV and consequently, whether the structured finance transaction can be said to benefit from limited recourse and non-petition covenants.

To further limit the risk that transaction creditors may (despite the existence of limited recourse and non-petition covenants) seek to take individual action to enforce repayment of their secured claims, structured finance transactions often use a security trustee, which holds and enforces the security on behalf of all the transaction creditors.

### Priority of Payments

Having a known universe of transaction creditors means that these creditors can agree to clear priorities in respect of the repayment of their liabilities by allocating the cash flows and other proceeds from the assets, according to a predefined distribution (or waterfall). Fitch will examine these arrangements to confirm that they reduce uncertainty of outcome and establish effectively the priorities of the noteholders and other transaction parties, both before and after the occurrence of a default.

Fitch will also examine the arrangements for the priority of repayment to any third-party SPV creditors (such as tax authorities) that are not transaction parties and therefore may not be bound by the limited recourse and/or non-petition covenants, and also may be mandatorily preferred by law.

### Isolation of Financed Assets

Fitch expects that structured finance transactions are structured to achieve such isolation and the agency will, as part of its analysis, undertake an assessment of the effectiveness of the proposed mechanisms to achieve this.

The precise mechanisms may vary depending on the relevant jurisdiction and on the objectives of the transaction sponsor. One established mechanism is by way of a sale of the underlying assets to the SPV (a true sale), the aim of which is to give effect to the transfer of title in a way that defeats as much as possible the ability of the originator (or any creditor of, or insolvency official appointed to, the originator) to overturn the sale and claw back the assets sold. How the transfer to an SPV of title to the assets is achieved will depend on the type of asset, its location, the law governing the asset and the law governing the sale.

Where the beneficial (or equitable) title, rather than the legal title of assets, is transferred at the outset of a transaction, Fitch will expect the structure to include appropriate perfection mechanisms to complete the transfer of legal title to the SPV at a point in time sufficiently prior to enforcement. This typically occurs in jurisdictions where the assets being transferred are in the form of a debt and the requirements under the applicable laws for an effective legal transfer to the SPV include notice in writing to the debtor or obligor. In these circumstances, the originator may not find it practical (or desirable) at the outset of the transaction to give the required notice to its underlying debtors to effect a legal transfer of the assets.

Alternatively, isolation of the assets is in some transactions achieved through an intermediate SPV acquiring the assets, which in turn is funded by a secured loan from another SPV (which in turn issues securities to finance the loan).

Whatever mechanism or structure is used, Fitch assesses the extent to which the assets have been isolated from the transferors and the SPV's controlling party. Fitch expects the transaction legal opinions to address the risks in the relevant jurisdiction(s) that an insolvency of the asset originator, or any other transferor, will result in the assets being clawed back into the insolvency estate of such entity.

Fitch analyses the relevant documents to assess the extent to which the assets in the SPV have been isolated from other parties.

### Operational Capacity

Fitch 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.

### Other Potential Threats to the SPV

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. For these reasons, Fitch does not expect the SPV to be vulnerable to a range of risks, including:

- re-characterisation of asset transfers;
- consolidation with its affiliates or service providers;
- tax obligations (including corporate tax, VAT, stamp duty or transfer taxes on realisation of collateral);
- pension liabilities (or other employee-related liabilities), tax liabilities or insolvency risk belonging to a group (usually that of the originator);
- thin capitalisation or other accounting-related risks;
- loss of priority of security interests of the noteholders;
- unavailability of expected liquidity in the transaction; and
- obligations or liabilities attaching to assets that may require capital expenditure (such as environmental risk).

Where such risks exist, Fitch examines any mitigating features to assess the impact of those mitigating features on the rating analysis.

### Issues Not Addressed by the Rating

There will always remain certain issues that are difficult to analyse, such as the risk of a vexatious or nuisance challenge, the potential for a change in the legal or tax regime and fraud. Issues such as these are not addressed in Fitch's analysis of an SPV, or in its rating opinion. Clear pending changes in the legal or tax regime at the time of assigning a rating may be addressed on a case-by-case basis.

### No Issuer Default Ratings for SPVs

Fitch is sometimes requested to assign credit ratings to SPVs themselves: ie what would effectively be the equivalent of an Issuer Default Rating (IDR) for the SPV itself, as opposed to the issue ratings that are assigned to the securities that it issues.

Fitch does not assign credit ratings to SPVs in structured finance. This is because the SPV has no real economic substance of its own; its assets are segregated, it conducts no business other than its participation in the structured finance transaction and it is restricted from assuming liabilities other than the issuance of the notes that form part of the structured finance transaction (although subordinate debt may sometimes be permitted).

The SPV therefore has no senior unsecured liabilities of its own that any rating could address. The risks involved with an SPV consist primarily of whether it has been effectively legally constituted; therefore, there are no credit-related risks that a credit rating could address. A credit rating for the SPV itself would therefore have no meaning.

## Appendix 2: Repackaged Structured Finance Notes

Additional considerations apply to rating securities backed by single tranches, or small pools, of existing structured finance notes. These repackaged notes (or re-securitisations) can have a senior/subordinate or simply a pass-through structure.

A senior/subordinate structure involves the issuance of both new senior and subordinate notes backed by the underlying bond(s), thereby creating extra protection for the new senior bond compared with the underlying bonds themselves. On this basis, the new senior note can achieve a higher rating than that of the original repackaged security(ies). Fitch will generally decline to rate the new most subordinated tranche of the newly repackaged transaction. If the agency decides to rate the subordinated tranche, it is likely to assign a rating below the existing rating of the note that is being repackaged.

In a pass-through structure, no additional subordination is created and the cash flows from the underlying security are simply passed through to the new notes issued by the new structure, In such a case, the rating of the repackaged note will be the same as that of the underlying security. Fitch's *Single- and Multi-Name Credit-Linked Notes Criteria* detail the analytical approach in the case of pass-through analysis.

Fitch will generally not rate repackaged securities where the performance of the underlying collateral is still highly uncertain or expected to be highly volatile. For example, in cases where the original notes are on Rating Watch Negative or Rating Outlook Negative, Fitch may either decline to rate the repackaged notes or apply additional stresses to compensate for potential volatility.

### Ratings of Repackaged Senior Notes

Fitch will typically rate only a repackaging of senior notes. Unlike senior tranches, subordinate tranches may be cut off from payments in the event of a default of the underlying transaction, in instances where senior noteholders, who control the choice of remedies, choose to divert cash flows from the subordinated notes.

Fitch may consider rating a repackaging of subordinated notes under sector-specific criteria or on a case-by-case basis dependent upon asset class, securities concerned, availability of sufficient information to analyse the underlying securities, stability of performance and rating level. In such cases, the risks associated with the subordinate position of the notes that are being repackaged would have to be sufficiently mitigated, as determined by Fitch's analysis of the proposed structure.

This also applies to rating of combination notes, where notes structured as either part of the same trust or as a separate SPV trust using tranches from other securities are combined, in whole or in part, to form new securities. Fitch's *CLO and Corporate CDOs Rating Criteria* detail the analytical approach for rating of combination notes, which could be applied in principle to another sector on a case-by-case basis. Fitch will not rate new combination note structures on the basis of a "rated balance" that may differ from the "stated balance" of the notes over time as there is a higher risk that the rating may be misconstrued or misunderstood by those relying on it like investors, risk managers or regulators. For case-by-case rating of a repackaging of subordinated notes, the agency's approach would be detailed in its rating communications.

In cases of the repackaging of a single or a small number of securities (typically, no more than five), Fitch will analyse underlying assets under the framework of relevant sector-specific criteria. In cases of the repackaging of multiple securities within a single SPV, Fitch may complement or replace this look-through analysis with a portfolio-based analysis that assesses correlated default risk and concentrations in repackaged securities. Fitch's *Structured Finance CDOs Surveillance Rating Criteria* detail the analytical approach in the case of portfolio-based analysis.

### Tranche Thickness Affects Portfolio-Based Analysis

The thickness of a tranche relative to the original size of the portfolio (tranche thickness) and the seniority of the tranche can be important determinants of the tranche's expected recovery and the resulting expected loss for the portfolio.

Thin tranches, which are usually junior tranches, tend to have lower recoveries in the event of a default and, as a result, Fitch can apply lower recovery assumptions for thin junior tranches (see *Structured Finance CDOs Surveillance Rating Criteria*).

### Derivatives from Underlying Transactions

Underlying structured finance transactions may embed various derivative contracts that aim to mitigate interest rate or foreign exchange risk. If an event of default occurs and the security over the collateral is enforced by the noteholders through collateral liquidation, the derivative contracts may be terminated. If these derivatives are out-of-the-money from the perspective of the underlying structured finance transaction, a lump sum termination payment is owed to the counterparty. This payment would typically rank senior in the waterfall and therefore would be made before any payments to the re-securitised senior notes. If there is a risk that the collateral securing underlying assets may be liquidated and/or derivative contacts terminated, resulting in a significant termination payment that ranks higher than payments to the noteholders of the re-securitised asset, Fitch is unlikely to rate such re-securitisation.

### Potential Consideration of Price Paid

Fitch uses its published rating criteria to form an opinion on a security. However, when assigning new ratings to a repackaged security, the agency may also consider the price at which the SPV purchases the original security (especially if there is a substantial gap between Fitch's rating opinion regarding the likelihood of full principal return and the market price).

While these principles address repackaged structured finance transactions globally, individual sector groups may publish sector-specific criteria that augment or supersede these guidelines.

## Appendix 3: Distressed Debt Exchange

Within SF, the vast majority of defaults are accounted for by missed coupon or principal payments. However, as SF transactions globally have faced more challenging asset performance and potential payment defaults following the financial crisis, incidences of possible distressed debt exchange (DDE) situations have grown within the SF sector.

Fitch may determine that a DDE results when an issuer, in conjunction with noteholders, decides to restructure or exchange the rated notes in an effort to avert a probable payment default. By definition, the restructuring or exchange will cause a reduction in original economic terms from the noteholders' perspective, and to some extent will therefore be distressed in nature. Such a reduction may consist of a reduction in, or deferral of, contractual coupon payments to noteholders.

### Determining a DDE

A DDE will be determined on the merits of the individual case, but may include a change of interest payment terms from timely to deferred, an extension of the rated notes' legal maturity, a reduction in structural protection that leads to a reduction in economic terms, or a tender offer involving an exchange on terms that are significantly worse than the original contractual terms. An element of subjectivity will remain in most cases.

When considering whether a transaction or class of notes should be classified as having experienced a DDE, Fitch would expect both of the following to apply: the relevant noteholders will suffer a material reduction in economic terms compared with existing contractual terms; and the restructuring or exchange will avert a probable payment default on the underlying notes.

Fitch will make the determination of a DDE event and any adjustments to its ratings based on the agency's assessment of each specific case and at its sole discretion. Fitch determines whether a restructuring or exchange is distressed in nature by reviewing the entirety of the proposal, the motivation for the proposal, and its economic impact on the holders of each class of rated notes, based on the information disclosed to Fitch.[1]

#### *Material Reduction in Economic Terms*

If, in Fitch's opinion, the proposed economic terms of a restructuring are significantly worse than the original contractual terms, or an exchange results in the investor receiving anything other than an equal amount of notes on similar terms, then there is a strong presumption that the restructuring or exchange, as the case may be, should be considered a DDE.

Fitch defines a material reduction in economic terms in an SF transaction as a restructuring or exchange proposal that results in holders of a security receiving revised terms that, taken overall, materially impair the economic position of the noteholders compared with the previous terms. It includes – but is not restricted to – any one of the following, or a combination thereof:

- reduction in principal balance;
- reduction in coupon;
- deferral of coupon payments, or payment-in-kind, on a note rated for timely payment of coupon;
- maturity extension;

[1] Fitch cannot guarantee that all relevant information is disclosed by the transaction parties, especially in the case of exchange or tender offers. Fitch expects that each issuer that has agreed to participate in the rating process, or its agents, will promptly supply to Fitch all information relevant to evaluating the ratings on such issuer or the relevant securities, including, without limitation, all material changes in any information previously provided, potential material events and the issuer's overall financial condition, which may require communication of non-public information to Fitch. We expect all such information to be timely, accurate and complete in all respects. This will include any information requested regarding tender or exchange offers made. Where Fitch cannot obtain sufficient information to form an opinion, the rating will be withdrawn at the agency's sole discretion.

- reduction in structural protection to holders of rated notes (e.g. removal of a protective trigger or termination event) leading to a negative economic impact; and
- contractual or structural reduction in the seniority of the note (the agency may determine that some changes eg, an increase in the amount of senior fees following servicer replacement, may not be regarded as material enough to constitute a DDE).

However, this does not mean that the restructuring or exchange is not in the noteholders' best interests. It may be the logical (or only) choice in the circumstances; however, the restructuring or exchange itself is, in Fitch's view, an acknowledgement of credit impairment. In determining whether investors have suffered a material reduction in economic terms, consideration may be given to whether the notes were purchased at a discount to par.[2]

Generally, DDEs in SF transactions involve one or more of the above. If there are no mitigating factors, the presence of any one of the above examples may be sufficient for Fitch to determine that a material reduction in economic terms has occurred. Fitch will determine during its committee process the materiality of any of the above referenced examples and factor this into its rating decision.

Although mitigating factors, such as an increase in coupon, may be present in DDEs, Fitch expects these will often not fully compensate for the impact of the DDE on affected noteholders. A rating committee will consider the restructuring or exchange in its entirety and determine whether a DDE has occurred.

Fitch's analysis may conclude that a DDE has occurred for some but not all classes of notes issued by a particular issuer. The decision will depend, amongst other factors, on the materiality of the change and the economic impact on each class of rated notes.

### *Default Risk*

The second element required in determining that an event should be considered a DDE is whether the event will avert a probable payment default on the notes. If the notes must pay interest on a timely basis, and it is clear to Fitch that the issuer does not have sufficient funds to make upcoming interest payments in future periods, then payment default under the notes is clearly imminent. In such a case, an exchange that changes the note terms to allow for interest deferral would very likely be classified as a DDE, as the notes would otherwise default without the exchange.

In other circumstances, a DDE may be more difficult to assess. Factors commonly associated with DDEs that may assist Fitch with this assessment include the following.

- Ratings have deteriorated since the original issuance, for example, where notes that were originally rated at investment-grade level have significantly deteriorated, so that ratings have been materially downgraded.
- Collateral performance has deteriorated significantly from original expectations, or when compared with securitisations of similar collateral (for example, where delinquency rates have significantly increased and pre-payment rates have reduced).
- Supporting counterparties are distressed, for example where one or more of the parties to the original transaction (for example, a swap provider) have defaulted or are in a high level of distress.
- Secondary market prices are substantially discounted, for example where mark-to-market (MTM) values have been declining and are distressed, or are low in comparison to securities of a similar type. As noted above, depressed MTMs are not necessarily indicative of credit problems with the notes themselves, for example where MTMs are depressed generally due to restricted liquidity in the market. However, where individual notes are valued substantially below otherwise comparable instruments in their peer group, this may be an indication of distressed performance.

[2] Fitch rates securities issues according to their contractual terms and conditions. Although mark-to-market values of securities may provide some indication regarding the nature of the exchange, such values themselves do not exclusively enter into Fitch's determination of whether investors have suffered a "material reduction in economic terms".

These are only potential indications and it is possible that Fitch may make a DDE determination in the absence of one or more of the above. Conversely, Fitch may not consider a DDE to have occurred, even if one or more of the above are present.

## Rating Implications

### *Pre-Execution*

When Fitch is informed of a proposed restructuring or exchange for the notes, which the agency determines to be a potential DDE, the credit rating of the notes affected may be placed on Rating Watch Negative. Once the details of the formal exchange offer or restructuring proposal have been finalised and communicated to Fitch, the affected notes may be lowered to 'Csf', indicating imminent default.

### *On Execution*

If the DDE executes successfully, the note rating is lowered to 'Dsf'. This reflects Fitch's view that a DDE has occurred and communicates to the market at large that the agency regards the DDE as a default.

### *Post-Execution*

Immediately after the effective date of the DDE, the note rating is raised from 'Dsf' and re-rated to a level reflecting the structure as it exists after the DDE. Any new note issued, or existing notes restructured in a DDE, will be rated purely on the transaction's credit profile after the restructuring or exchange, coupled with any structural and/or legal considerations related to the specific issuance.

As a result of the exchange, new notes, which replace the previous notes that are extinguished, may be issued. In these instances, the newly issued notes are assigned a new rating on the effective date of the DDE. Conversely, the rating of the extinguished notes, having been lowered to 'Dsf' on the effective date of the DDE (as described above), is withdrawn.

Old notes that remain outstanding, but with restructured terms and conditions, are re-rated to reflect the agency's opinion regarding the new credit profile of the notes, after the DDE has been executed. The fact that any note issue was a product of a DDE is not relevant to the current rating.

## Appendix 4: Rating Caps and Limitations

Fitch may view certain characteristics of SF transactions to be incompatible with certain rating categories. Fitch's ratings may therefore be subject to a rating cap. Limitations may be such that it is not possible to rate the notes. This section discusses factors that influence the application of caps. It does not define highly prescriptive and granular rules that apply in all circumstances, due to the variations in SF asset classes. Specific rating caps in an asset class or market sector will be specified in the related sector-specific criteria reports where applied. Where specific caps are applicable based on sector-specific criteria, the sector-specific criteria take precedence over the criteria published in this report.

This section provides a high level framework of the principles Fitch's SF analysts will apply to assess transactions. In certain cases, transactions will not achieve high investment-grade categories (ratings at 'AA' or higher) on principle, regardless of the degree of credit protection or structural mitigation around the notes. Rating caps may be imposed at any rating level, depending on a sector or transaction's individual circumstances.

Rating cap considerations may apply to both national and international scale ratings. However, cap levels for national scale ratings will consider the specific circumstances of the individual country and its national rating scale, which differ in nature to the international rating scale. Cap considerations may be less relevant for national ratings (for example, data availability across all sectors in the country may represent a systemic issue where the national scale applies). Nonetheless, instances that would fundamentally prevent any rating would apply equally to national scale ratings.

A transaction that does not meet all of the elements described in this appendix may still be rated, if Fitch determines that such transaction is compatible with the purpose and intent of Fitch's ratings and where Fitch believes it has sufficient information to form a credit view.

## Portfolio and Data Quality

Under *Data Adequacy* above, Fitch explains the data it expects to receive and relies on for its transaction analysis.

Fitch expects to receive loan-by-loan data to perform its analysis for certain types of SF transactions. If specific loan-by-loan information is not available, significant market-wide data and other feedback from the originator may often provide proxy information.

While the length of time may be extensive, data may only cover a period of benign economic circumstances and may therefore be insufficient to develop robust assumptions. Such data for a long benign period allow limited insight into how performance may unfold during the downturn part of the cycle, especially since a sustained extended upcycle could itself be indicative of a "bubble". A lengthy benign period can mean a subsequent sustained and lengthy down-cycle as performance reverts toward the long-term trend.

Fitch also considers how product types have evolved over the period for which data has been provided with very long-dated assets. If product features have changed significantly, then data provided regarding assets that originated 20 or more years ago (and in some cases even a shorter period) may no longer provide sufficient insight as to how assets might perform in the future and, hence, become less relevant. Qualitative adjustments may be sufficient to address limited changes in product features, such that a rating cap may not apply. However, multiple layers of product change giving rise to several layers of additional risk would be more likely to lead to a rating cap unless there was supplementary data available to assess how such product evolution may influence future performance.

The relevance of historical data to ratings analysis may be a particular issue for transactions with "tail-end" market value risk (see *Excessive Market Value Exposure* section). This may be a function of a fundamental systemic shift whereby historical performance patterns may suddenly change, rendering risk assessments based on historical data less predictive of future performance. The modelling framework will be subject to additional scrutiny in these circumstances, with a particular focus on how short-term liquidity stresses could affect the transaction.

If an originator is not capable of producing historical performance data in line with the aforementioned description for the assets targeted for securitisation, the transaction proposal is unlikely to be rated by Fitch unless strong mitigants, such as relevant market-wide data, are available. In asset classes where the originator-specific underwriting criteria are expected to have a limited influence on the credit quality of the portfolio (eg syndicated loans or commercial property loans), available market data are expected to be more relevant than specific originator data.

Some transactions backed entirely by a portfolio of a certain type of assets may see a rating cap imposed where, for example, those assets have a particular attribute or emanate from a volatile sector of the market. However, there may be instances where a transaction is backed only by a proportion of such assets rather than the entire portfolio. In such a case, the transaction may still be eligible for ratings in the highest categories if, in Fitch's analysis, the relevant portion of the portfolio would effectively get no credit and would be expected to result in a total loss in rating scenarios above the level where a rating cap would ordinarily be expected to apply to such assets.

The sector-specific and bespoke criteria reports provide a detailed description on the type and extent of data expected for each asset class that is in line with the above principles.

### Possible Mitigating Factors

If available originator data do not fully meet the aforementioned standards, representative proxy data can be considered to supplement otherwise inadequate historical originator performance data (either in terms of length of time or direct relevance) and the rating of a transaction. In addition to considering other sources of data, Fitch may also take into account any relevant information or industry perspective from other analytical groups within Fitch.

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.

If the jurisdiction where the receivables are originated has a significantly different legal and political regime compared to other jurisdictions where proxy data may be available, then it is unlikely that data from these jurisdictions can qualify as a proxy due to its limited relevance. In such cases, Fitch is unlikely to assign a rating.

For those ratings that proceed subject to a rating cap, based on limited data supplemented with proxy information, default, and loss severity assumptions will be higher than might usually be the case for the rating categories concerned if more extensive data were available. This reflects penalties applied in the analysis to mitigate increased uncertainty regarding the data used to derive rating assumptions, which will result in higher base case loss expectations and/or higher stress levels and higher credit enhancement than would be the case with more data.

In the event that there is only limited deficiency of historical data and/or proxy data available as described, it may be possible to rate a transaction without a rating cap. This limitation would be mitigated through applying significantly higher asset stresses to reach higher investment-grade categories. Such an approach can be taken either at a criteria level if significant wider market information is available or at a transaction-specific level.

## Asset Concentration and Performance Volatility

Asset concentration concerns arise, for example, where the performance of a transaction is fully or materially dependent on a single industry, a small geographic region or very few obligors, especially if these are combined with a low credit quality. Transactions that are initially granular may become concentrated over time as they season and amortise. In such instances, a rating cap may apply. Fitch expects such risks to be addressed through structural mitigants such as credit enhancement floors in new transactions.

### Industry Concentration

In case of industry concentration, Fitch would analyse the type of industry (or the small number of connected industries as the case may be) and analyse whether such industry is characterised by very volatile asset performance, few players, or a large degree of uncertainty (for example, through the obsolescence of key technology). If such considerations are prevalent, a rating cap is likely to apply.

Examples where such an industry concentration rating cap may apply include, but are not limited to: (a) a securitisation of junior commercial property loans (B notes), particularly if in a single jurisdiction or related jurisdictions or regions; (b) a securitisation of shipping loans, particularly if strongly dependent on volatile spot freight rates; and (c) a securitisation backed by future cash flows from legal settlements owing from tobacco companies to US states (tobacco settlement ABS).

However, standard granular SF transactions are not considered to fall into the single industry category. Specific segments of the consumer finance market like auto and credit card loans or the commercial real estate market are characterised by markets with adequate performance data, such that robust analytical assumptions may be developed. While these sectors may be exposed to cyclical behaviour, Fitch typically does not apply a rating cap because of the relatively low degree of uncertainty associated with the robust performance data. Consumer finance transactions are also exposed to a large granular pool of obligors where an opinion can be formed on collective behaviour in stressed scenarios.

Similarly, a securitisation of a diversified portfolio of high- yield corporate obligations would also not be considered to be subject to the single industry exposure. While the lower credit quality assets are subject to higher performance volatility, a rating cap may not apply provided these transactions demonstrate significant industry and obligor diversification (thus sufficient overall stability). Despite this, rating caps may be applicable in certain granular asset classes where a transaction is concentrated in a sector or subsector in which historical performance has been volatile or unpredictable. These may include transactions backed by non-traditional or riskier credit quality assets combined with more aggressive underwriting practices and/or other risk factors. It may also include transactions concentrated in particular vintages originated in peak conditions where historical performance has been poor and highly volatile.

### Prefunding and Revolving Periods

Additionally, transactions that have long prefunding or revolving periods or where the prefunding amounts are considered significant may not be rateable or may be subject to a cap on the maximum achievable rating. These structural features expose noteholders to additional risks with respect to a longer risk horizon. In particular, there is an increased risk of being subject to negative evolution in the credit profile of a collateral portfolio, particularly in the run up to the peak of a cycle, with the risk of increased losses during a subsequent downturn.

Fitch may also have concerns regarding the incentives of transaction parties (see *Incentives of Transaction Parties* below) for revolving or managed transactions where the collateral may significantly change over time and originators or managers may have the incentive to sell or substitute low quality assets into the portfolio to maintain short-term funding to the company. While eligibility criteria typically provide some protection against this, they usually do not fully address a material misalignment of interests. Depending on transaction-specific arrangements to address such concerns, a rating cap may apply or the transaction may not be rateable.

### Excess Spread Notes and Excess Spread Dependence

Excess spread notes are defined as capitalised notes issued in addition to the principal balance of the receivables and the balance of cash reserves as at the initial cut-off date and where the repayment of those notes is dependent upon the availability of excess spread. The model-implied ratings of such notes are highly sensitive to cash flow modelling assumptions, especially prepayment rates. Ratings of such notes are capped at 'BB+sf'. Similarly, the ratings of those notes whose repayment excessively, even if not entirely, relies on excess spread may be constrained.

### Geographic Concentration

Similarly, if significant geographic concentration is present, a rating cap may also apply. For example, this can be the case if an RMBS transaction is mainly backed by mortgages of secondary or holiday homes located in a region or an island dominated by tourism. Fitch believes such a transaction may be subject to performance volatility that is inconsistent with 'AAAsf' ratings. Determination of whether a rating cap will apply will depend on a specific analysis of the economic profile of the region concerned. Less acute geographic concentrations can be addressed by specific analytical adjustments that would be described in related sector-specific or bespoke criteria or transaction-specific reports.

### Obligor and Asset Concentration

Rating caps can also be applicable if a significant asset or obligor concentration is present in a transaction portfolio. However, this also depends on the asset class, type of obligor or asset concentration, and the asset credit quality. For example, the securitisation of a single high-quality New York commercial property is unlikely to be subject to a rating cap due to the expected high-quality liquidity and re-sale value of the underlying property. On the other hand, a transaction backed by unsecured debt from a small pool of 'BBB' rated corporate obligors is unlikely to achieve a rating above 'Asf', as opposed to more granular transactions.

Asset or obligor concentration risk may arise in transactions that are initially granular but experience increased small pool or loan count concentration over time. Increased tail-end credit enhancement targets may be one way of mitigating this risk as transactions season and amortise. Fitch will apply rating caps for transactions that could experience such loan count concentration and where the transactions lack any type of structural mitigants to offset potentially increased performance volatility as the pool size declines.

## Legal Terms and Conditions

Fitch generally assigns ratings to SF instruments that address the likelihood of receiving payments in accordance with the terms and conditions on which investors make their investment, i.e. in accordance with the terms and conditions of the transaction documents.

However, the terms and conditions can include elements that Fitch deems incompatible with high investment-grade ratings, particularly at the 'AAAsf' level, which would result in ratings being capped or limited. Some elements may be incompatible with any rating being assigned. Examples include, but are not limited to, those described in the subsections below.

### Deferability of Notes

Fitch's SF ratings address the likelihood of receiving payments in accordance with the terms and conditions on which the investor makes its investment. This means that, for principal repayment, a Fitch rating addresses the repayment by the legal final maturity of the note (unless there is a pre-defined principal repayment schedule that would represent an event of default if not met).

Fitch will not assign international scale category ratings of 'AAAsf' or 'AAsf', or national scale ratings equivalent to these ratings, to notes that it expects would defer interest under stress scenarios associated with those ratings, even if permitted under the terms of the documents. Fitch will assign international scale category ratings of 'Asf' or 'BBBsf', or corresponding national scale ratings, for bonds that are projected to incur deferrals under an expected case scenario (which in the absence of a published "expected case scenario" will refer to a 'Bsf' scenario) only if the following conditions are met.

- Deferrals are permitted under the terms of the documents;
- Deferrals must be fully recovered under the terms of the documents well in advance of the legal final maturity in the rating scenario associated with the rating assigned to the note;
- The deferral period is not deemed excessive;
- Noteholders are viewed as being in a substantially similar economic position as if deferral had not occurred; and
- Noteholders are given clear indications that deferrals may occur (e.g. notes are titled "deferrable notes" or deferral is outlined as a risk factor of the notes in the offering documents).

Fitch will review cash flow results or similar analysis to assess the likelihood and frequency of interest deferrals in expected and stress scenario cases. In each case, Fitch will explain in its rating communication if the rated notes can, according to the notes' terms, defer or capitalise interest, if, according to the rating analysis, deferral is expected to occur and whether ratings have been capped as a result.

### Certain Note Event of Defaults

Certain transactions may underperform in relation to Fitch's initial expectations, resulting in the occurrence of a note event of default. However, despite this, the note event of default may not be expected to result in any change to the allocation of transaction cash flows nor result in any interest or principal loss to the security, according to Fitch's current expectations, provided the transaction continues to maturity. While such events may not affect Fitch's credit analysis, nevertheless they are usually indicative of some form of performance stress.

In such circumstances, higher investment-grade ratings will generally not be achievable in cases where a transaction may have entered a note event of default due to the breach of a trigger but is otherwise performing within Fitch's expectations. Such note event of default triggers are often linked to overcollateralisation or coverage ratio tests that are prevalent, for example, in SF CDO transactions. Note events of default may continue to be unremedied for the life of the transaction if no enforcement action is taken by the majority of the controlling class.

### Conditional Reduction of Interest and/or Principal

Fitch has been approached with transactions where the terms and conditions specify the reduction of an interest distribution and/or the reduction of principal proceeds, subject to certain credit events (for example, the reduction in an interest rate coupon if a sovereign credit defaults – thereby embedding credit risk within the definition of the interest coupon). In such cases, when assigning SF ratings, Fitch would depart from the principle of rating to the documents and will also consider the likelihood of such a conditional event occurring in combination with other structural arrangements.

This is because, in such circumstances, a credit rating opinion delivered on the form of the transaction as described in the transaction documents would not effectively express an opinion on the substance of the entire credit profile of the transaction when considered as a whole (i.e. Fitch would apply the principle of "substance over form" in such cases). This could result in a rating cap or make a transaction not rateable at all.

In instances where receipt of an interest coupon (or part of an interest coupon) is conditional on credit risk (for example, the earlier example of the reduction of a coupon on the default of a sovereign credit), Fitch's rating will address the credit risk embedded in the interest coupon as well as the return of principal. This is because a credit opinion can be formed regarding the likelihood of the conditional reduction in the interest coupon. Therefore, the rating would be capped or limited by the credit position of the sovereign credit if lower than that of the entity that has the obligation to make interest and principal payments.

Fitch has also been approached to rate SF notes where the interest rate coupon or principal is market linked through dependence on the performance of a market or credit index (for example, an equity index such as iTraxx). Fitch would not rate such a transaction, because it would be unable to asses the substance of the market value exposure (see *Excessive Market Value Exposure*).

For clarification, this does not apply (and rating caps are not applicable) if interest distribution amounts are variable because payments are based on a margin over a floating interest rate index (such as Libor) or inflation indices.

Similarly, in cases where a note coupon payment is based on the outstanding note balance less write-downs or where coupon payments on a given interest payment date are permanently extinguished based on the occurrence of certain credit-related events (e.g. level of defaults or losses), Fitch would depart from the principle of rating to the documents. Fitch would model such structures according to the transaction documentation and will only assign a rating if in the relevant rating scenario principal and interest are paid in full and the trigger event for the credit-related reduction in interest payments is not expected to occur during the life of the note in the relevant rating scenario.

This is, for example, the case of those structures where the coupon payment is not based on the outstanding note principal balance of the note but on the so called "outstanding stated note principal balance" (i.e. outstanding note principal balance less charge-offs or, alternatively, less the outstanding principal deficiently ledger [PDL]) or whose coupon payments are not made when the stated balance of the note is zero. In those instances, Fitch would only assign a rating if in the relevant rating scenario the coupon payment is not affected by the presence of charge-offs (or PDL).

Other examples are the two-stage payment synthetic structures described in *Appendix 5*.

Generally, Fitch would be more concerned about a conditional reduction of principal payments than interest payments, although either can, in Fitch's view, lead to a rating cap or make a note not rateable.

#### *Net WAC Caps*

Net weighted average coupon (WAC) caps, which cap the interest due on certain tranches to the level of the WA interest rate owed on all assets, are an example of a conditional reduction of payments, eg the interest distributions can be reduced, capped, or deferred in adverse interest rate or prepayment scenarios. Net WAC caps do not result from credit-related issues, aside from payment reductions related to established loan servicing standards (such as distressed loan modifications in US RMBS and US CMBS) or limited reductions from delinquency in some US RMBS structures. Where securitisation markets have evolved with net WAC caps or similar features as an established market standard (ie in US RMBS and US CMBS), Fitch believes that the limitations of these features are widely accepted and well understood by market participants, including investors.

In such cases, Fitch's rating opinion does not address the likelihood of receipt of any interest cash flows that might exceed the net WAC cap or similar features, nor would such features be a cause for a rating to be capped. Fitch would expect that the consequences of these features are clearly explained in transaction documentation, and these features would not give rise to any conditional reduction in payments as a result of credit-related issues, such as reduced asset revenues owing to obligor default.

In contrast, in securitisation markets or sectors where net WAC caps or similar features have not been used, where Fitch believes the concept is not familiar to market participants and where it also believes the prospect for inconsistencies between ratings in the sector could arise, Fitch will test for receipt of liability-side cash flows gross of the conditional reduction (eg in excess of the net WAC cap) in its rating analysis, or consider applying rating caps to notes subject to a net WAC cap.

### Principal-Only Ratings and Principal-Protected Notes

Occasionally, Fitch assigns ratings that only address the ultimate payment of the principal at or before the maturity and do not include an opinion on the ongoing or ultimate payment of any interest distribution. This will typically be the case where no coupon is specified (eg zero-coupon notes). Fitch will not assign principal-only ratings where an interest coupon for a note exists.

For principal-protected notes, the principal is typically protected by a pledged asset or benefits from the guarantee of the sponsoring bank. Such protection would typically be limited to the creditworthiness of the guarantor and terms of the guarantee. Additionally, Fitch can consider applying rating caps to certain principal-protected notes where the transaction structure is deemed too complex. Any such limitation of the rating will be specified in Fitch's rating communication.

### Step-Up Interest Coupons

SF transactions sometimes include arrangements for a step-up interest coupon, or increased interest margin, which is intended to provide an incentive for the originator or equity tranche holder to exercise an early prepayment option at a "clean-up" call for the transaction. Usually such step-up coupons are part of the defined coupon and are paid pari passu with the given note class and their non-payment on senior notes would cause a payment default. In its analysis, Fitch will assume that the clean-up call is not exercised and, therefore, the note coupon will step up and the step-up interest amounts are addressed in Fitch's analysis.

In contrast, Fitch may be approached with transaction structures where the step-up coupon would be paid subordinate in a transaction waterfall (ie junior to the lowest-rated note) and where the non-payment of the step-up coupon would not cause an event of default for the transaction, according to the transaction documentation. In such instances, Fitch will consider not addressing the subordinated step-up interest payments in its rating opinion, depending on the circumstances.

Fitch will expect to exclude such cash flows from its rating analysis where securitisation markets or sectors have evolved with this subordinated feature being an established market convention, where Fitch believes investors do not expect to receive such cash flows and where there has been clear and prominent disclosure in transaction documentation as to their subordinated nature and exclusion from events of default. In such instances, Fitch believes investors will have greater use for a rating opinion that only addresses the interest and principal cash flows that they actually expect to receive. Any such limitation of the rating will be clearly specified in the relevant sector-specific criteria and in Fitch's rating communication.

Practical Application – Fitch will consider not assigning ratings where there is a greater potential for the rating to be misinterpreted, misused, or misrepresented. Therefore, ratings assigned to interest-only (IO) securities will be directly linked to the credit risk of the referenced tranche or tranches:

- IOs that reference a single tranche will be rated at the same level as the referenced tranche;
- IOs that reference multiple tranches will be rated at the level of the lowest referenced tranche whose payable interest has an impact on the IO payments; and
- IOs that only reference: (i) non-rated tranches; (ii) the entire capital structure where the lowest referenced tranche is non-rated; or (iii) tranches for which no cash flows are currently present or will be in the future will not be assigned ratings by Fitch.

In contrast, where such a feature has not been used in a particular subsector where Fitch believes disclosure is unclear or where the prospect for investor misunderstanding is high, Fitch could choose to include the step-up coupon in its rating opinion so as to allow for consistency in the basis for ratings across that subsector. Where step-up coupons are included in the rating opinion, they will be included in Fitch's cash flow analysis. In cases where a step-up coupon is paid subordinate in a transaction waterfall, the rating will be limited by the reduced likelihood of receiving this payment at the subordinate level. This can lead to a rating cap consistent with the payment of the subordinate payment, or make such notes not rateable.

Additionally, Fitch will not assign interest-only ratings where principal cash flows exist.

### Ratings with Limited Credit Value

Previously, Fitch has been asked to assign ratings that are non-traditional or have no or limited credit substance due to the defined terms and conditions of the notes concerned. Examples are mortgage early redemption certificates, where investors will receive distributions only to the extent that early redemption payments are received by the SPV. The rating can only address the mechanics of whether the distribution of funds from early redemption will happen, but not express any form of credit opinion as to the extent of such redemptions. Such notes would only be subject to rating action resulting from issues related to the defined terms and conditions rather than any real credit opinion. Therefore, such a rating would be of limited value from a credit perspective and will not be assigned at any rating category.

As a general guide, if Fitch cannot envision scenarios where a note's ratings may be subject to rating actions due to credit issues, it is very likely that the rating would be considered to lack any real substance. In such situations, no Fitch rating will be assigned.

### Lack of Transaction Economic Substance

It is Fitch's practice not to rate transactions that exist, in the agency's view, solely for tax and/or accounting considerations without serving any fundamental economic purpose. While tax and/or financial reporting considerations are often one of a number of motivating factors for issuers of SF transactions, such considerations will generally be complementary to a principal economic motivation. In the event that there appears to be no economic substance to the structures, apart from tax-avoidance schemes or accounting window-dressing, Fitch will not rate the transaction. While the agency may have no reason to believe such transactions are illegal in any way, such structures are not compatible with the purpose and intent of Fitch's ratings.

## Excessive Market Value Exposure

Fitch will generally not rate SF transactions with material exposure to market value risk, but its Fund and Asset Management team can rate certain market value structures under the *Closed-End Funds and Market Value Structures Rating Criteria*.

In addition, a rating cap may be applied to transaction structures that: (a) rely on a servicer's ability to achieve a loan workout or to liquidate collateral in an orderly fashion in the most stressed environments and/or a very limited time horizon (e.g. as a transaction approaches its legal final maturity date); (b) include assets with limited trading, pricing, and liquidity history; or (c) include assets with knock-out market value triggers in which the breach of a pre-specified trigger (albeit usually set far from current market levels) will result in a default of the transaction with often nominal recoveries.

In Fitch's view, these examples demonstrate a level of "tail-end" risk (or risk of extreme events) that – particularly with respect to market price movements – is deemed to be incompatible with high investment-grade ratings. As a result, the ratings are capped as a matter of principle. No level of data, credit protection, or other mitigants will achieve ratings higher than the cap. Unlike asset performance data, historical data with respect to market price movements may provide less insight into the future path of such price movements.

The rating cap is largely driven by the limitations of effectively assessing the liquidation prospects in the tail-risk scenarios. For certain assets, forced liquidation prices in most severe scenarios may be so low such that no credit could be given to them in such an environment.

## Sovereign Dependency

Sovereign governments and their agents can affect the operating environment for private entities and SF transactions in many ways. While the securitisation industry has developed a number of techniques to mitigate these effects, Fitch believes it is ultimately not possible to entirely eliminate the risk that sovereign credit matters will affect the performance of an SF transaction. A high level of sovereign default risk raises the prospect of extreme events occurring in a country and reduces the certainty of performance projections for SF assets. For this reason, a rating cap will be applied in certain circumstances. Fitch's *Structured Finance and Covered Bonds Country Risk Rating Criteria* address sovereign risk in both developed and emerging markets, as well as transactions with multi-jurisdictional structures.

### Legal Uncertainties and Pending Litigation

Rating caps can also be applicable where there are concerns regarding the robustness of the legal framework affecting a particular asset class or a particular jurisdiction. One means of assessing this is to examine the extent and materiality of reservations, qualifications, and assumptions in legal opinions, which may weaken the views expressed therein. Whether any rating cap is applicable – and at what rating level – will be influenced by the likelihood of the legal event, subject to reservations or qualifications. Where insufficient comfort can be obtained regarding salient legal issues, it is unlikely that Fitch will assign a rating at any level.

Fitch may also cap ratings if the agency expects that its ability to assess the impact of transaction costs and/or cash flows is impeded to a material extent by a pendling litigation affecting transaction parties.

## Third-Party Dependencies

In addition to sovereign dependency, counterparty risk and certain operational dependencies decribed earlier in the report, there could be other instances where the SF transaction performance can depend to a substantial degree on the continued performance of a third party (eg the originator, seller or others). This can result in material credit exposure to that third party or provide operational dependency if the third party performs crucial functions that may not be replaceable and are crucial to the transaction performance.

In such instances, the rating can be capped at the level relative to the relevant third party or at a certain level above the originator's rating. Examples include, but are not limited to, the case where a significant percentage of the pool comprises employee loans tied to one originator. Another example would be where the true sale or a clear segregation of the assets cannot be achieved or where there is no clear legal comfort that such asset segregation is effective, absent any structural mitigants.

Ratings caps can also apply where there is a material reliance on the ongoing operations of the originator or aggregator. This is the case in future flow transactions, which securitise the cash flow originating from a specific business line of a bank or company that produces goods or services for (foreign) obligors. Fitch assesses the risk through a going concern assessment score that allows for a rating between zero and six notches above the local currency IDR of the originator (for more details, refer to the *Future Flow Securitization Rating Criteria* ).

This will also apply to revolving structures where there are doubts about the originator maintaining the same quality of origination standards or ensuring data integrity.

## Incentives of Transaction Parties

Ideally, the incentives of transaction parties are aligned with the interests of the noteholders. However, this is not always the case and some misalignments of interests or incentives can be so material that a rating cap would apply or ratings would not be achievable at any rating level. For example, especially for originators that are in some form of financial distress (as may be indicated by a low rating), an analysis of the incentive structure of the originator and any counterparty dependency is needed. This could be also the case when the deal structure increases the risk of misalignments of interests or incentives between the various transaction parties (see *Moral Hazard Risk* in Appendix 5 for a detailed example).

Issuers may also sometimes look to include provisions in transactions that allow for optionality on the part of the originator or other counterparties. How transaction counterparties may behave when exercising such optionality provisions is a consideration when assigning ratings to SF transactions. Where a specific action of a counterparty (other than the investor[s]) could lead to a significant note impairment, Fitch would not be able to rate the transaction at any level. Examples for this situation would be: (a) the option of an originator to call the transaction notes (or repurchase all the assets) at a price that could lead to a loss of either interest or principal for the noteholders; or (b) the ability to redeem notes at any level chosen by the originator, thereby potentially altering the credit protection position across the structure.

## Appendix 5: Synthetic Securitisations

Synthetic securitisations (as opposed to true sale securitisations) are transactions that reference the performance of a portfolio of assets through credit default swaps (CDS), guarantees or similar instruments and do not involve the true sale or any other form of asset transfer.

The risk of the reference portfolio is transferred by an originator/asset-holder/protection buyer (the protection buyer) to an investor/protection seller (the protection seller), who has the obligation to make protection payments to the protection buyer upon the occurrence of certain "credit events" (see *Assessing Credit Events and Protection Payments*) in the reference portfolio. The protection seller receives in exchange a periodic or an upfront payment (the premium) from the protection buyer.

### Funded vs Unfunded

In typical fully funded synthetic structures, the protection seller is an SPV that funds itself by selling interest-bearing notes to investors, who ultimately bear the credit risk of the reference pool.

The cash advanced by investors is deposited in an account of the SPV and may be invested to minimise the cost of holding cash (see *Charged Assets in Funded Structures*). Such deposits are the security for the SPV's obligations to the protection buyer, and for its obligations to repay principal of its notes (which are normally paid when the reference pool amortizes and protection no longer applies to the amortized amount).

The SPV uses the premium paid by the protection buyer and any interest earned on its deposits and/or investments to pay the interest on the notes. If the protection buyer fails to pay the premium, the transaction is normally automatically terminated and the SPV returns the deposited funds to the investors.

The protection buyer raises a claim to the SPV once an asset in the reference portfolio has suffered a credit event. The SPV satisfies the protection buyer's claim using the deposited funds. In some transactions, the protection buyer's claim to the SPV may be limited to the amount of protection payments that exceed a threshold specified in the transaction documentation. For example, loss protection payments on loans affected by a credit event may be limited to the cumulative amount of loan losses that exceeds a percentage of the reference portfolio.

At the notes' maturity date, investors will receive a principal payment corresponding to the cash paid to buy the notes less the payments made by the SPV to cover for the credit events less any amounts paid to amortize the notes during the life of the transaction.

Fitch considers synthetic transactions where notes are issued directly by the protection buyer, and cash advanced by investors is therefore not held in an account of the SPV, as particular types of funded structures. This is the case, for instance, of earlier US credit-risk-transfer and certain US on-balance-sheet risk transfer transactions.

Unfunded transactions do not involve any issuance of notes and investors take the protection seller role by entering into CDS, guarantees (or similar unfunded instruments) with the protection buyer.

Partly funded synthetic transactions involve a mix of the unfunded and funded structure types.

### Balance Sheet vs Arbitrage

Balance-sheet securitizations differ from arbitrage deals because they involve assets sitting on the protection buyer's balance sheet. The protection buyer's goal is primarily the risk transfer and - eventually - the related capital relief of the portfolio.

In an arbitrage deal the protection buyer aims to gain an interest margin by providing investors with customised risk/return profiles. These are achieved by underwriting CDS on reference assets that do not necessarily sit on the protection buyer balance sheet (naked CDS) and therefore are not a reflection of the protection buyer's risk exposure or business in general.

## Rating Analysis

When it rates funded synthetic structures, Fitch expresses an opinion on the likelihood of default on the payment of interest and principal due under the terms of the notes issued by the SPV.

When the ratings are assigned to CDS or guarantees (or similar unfunded instruments), they address the likelihood of a claim being made by the protection buyer, and the likelihood that the protection seller will receive the premium for the duration of the credit protection period (i.e. up to the deal maturity or to the point of early termination). For avoidance of doubt, the ratings do not represent a counterparty rating on the protection seller or its financial capacity to meet credit event claims.

For transactions that hinge on "physical settlement" CDS or similar arrangements where the protection buyer claim consists in the par value of the defaulted assets (as opposed to the loss on the asset) and triggers the delivery of the defaulted assets to investors (directly or through the SPV), Fitch's ratings indicate the adequacy of the available credit enhancement against the risk of assets default, i.e. the "risk of assets being delivered to the investors".

### Assessing Credit Events and Protection Payments

Credit events and related protection payments tend to be connected with the concept of "asset loss" but their definitions vary across transactions, asset types and jurisdictions.

The starting point of Fitch's rating analysis is the sector-specific criteria applicable to the reference portfolio. As the definitions of credit events and of the protection payments resulting therefrom are heterogeneous, Fitch will consider any difference between the transaction's definitions and the variables analysed by its sector criteria and adjust its analysis to account for material differences.

For example, most of Fitch criteria assess the ultimate asset losses (the loss on defaulted assets once the workout has been completed), while the definitions of credit events and of the related protection payments could embed different loss designations, for example by including asset restructuring as losses or a different arrears period than the one used in our criteria for defaults.

Another common difference is that Fitch criteria normally assess ultimate losses over the entire life of the portfolio, while the tenor of a synthetic transaction can be shorter than its reference portfolio's. In these instances, Fitch may adjust its sector-specific criteria assumptions to reflect the shorter risk horizon. This may include reducing the portfolio "lifetime loss expectation" and applying default distributions that do not necessarily match with those specified in the reference sector-specific criteria.

Where not disclosed in the sector-specific criteria, Fitch will disclose adjustments to the analytical assumptions in the transaction research. These adjustments will lead to a criteria variation from the sector-specific criteria.

### Moral Hazard Risk

The asymmetry of information and the opposing economic interests of the protection buyer and the protection seller can result in moral hazard issues. Fitch will not assign ratings to deals where the agency believes moral hazard risks are not adequately mitigated.

Moral hazard issues may to a large extent be addressed by appointing at closing a reputable independent third party to monitor the risks detailed below.

Other mitigants of moral hazard risk include:

- Alignment of the credit events and of the protection payments resulting therefrom with the protection buyer's business practices (see below).
- Clearly documented definitions of credit events and of the related protection payments, with limited degrees of freedom for the servicer. In this context, Fitch believes It is unlikely that credit events that depend on regulatory provisions will offer room for major moral hazard issues.

- Objective and transparent processes for verifying asset eligibility, identifying credit events and quantifying the related protection payments.
- Homogeneous servicing process that do not allow the servicer's employees to distinguish between protected and non-protected assets.
- Comprehensive and verifiable servicing reporting.
- Independent data audit or sample due diligence at closing.
- Regulatory oversight and reputation of the protection buyer.

#### *Credit Event Definition and Claim Eligibility*

Fitch believes moral hazard risk is less pronounced when the credit events and the related protection payments are aligned with the protection buyer's business practices. This is the case for example when the payment upon a credit event is defined as the "asset loss" and that asset loss matches the actual loss at the end of the workout or the protection buyer's accounting practices for recording losses.

Some transactions assume a fixed loss given default, i.e. the protection buyer can make a fixed claim upon the default of an asset, regardless of the outcome of its workout. In Fitch's view, this feature alone does not remove moral hazard risk, as the protection buyer/servicer may take advantage of information asymmetry and negotiate a higher fixed claim than the loss given default it expects on the assets, distorting its incentives in managing credit events.

In the absence of adequate mitigants such as an independent data audit, a sample due diligence at closing or a third-party verification upon credit event, moral hazard issues may also arise where asset eligibility for protection is assessed by the protection buyer only.

#### *Servicing*

Synthetic securitisations' servicing arrangements normally limit the investors' ability to influence servicing and to take actions in the case of bad servicing performance (i.e. inefficient or biased servicing) as, among other things they do not normally provide for a servicer replacement.

This risk is particularly prominent where the reference portfolio consists of few large and/or complex assets such as synthetic CMBS, where the protection buyer retains certain rights as lender of record (e.g. the right to appoint an administrator) that in a true sale deal would be transferred to the investors as "co-lenders of record". Where the protection buyer has such a privileged position, Fitch does not regard the protection buyer's reputation or the high-profile/visibility of the transaction as a mitigant of moral hazard.

### Adverse Selection Risk

Fitch will not assign ratings to transactions where it believes there is adverse selection that cannot be adequately incorporated in its analysis.

Adverse selection risk is less likely in balance-sheet deals than in arbitrage deals if the reference portfolio comprises randomly selected assets that belong to the protection buyer's core business, because the performance of the reference pool would be likely to mimic the performance of the protection buyer's remaining portfolio.

However, as for true sale transactions, adverse selection may also be present in balance-sheet deals. For example, adverse selection may be material when the reference portfolio comprises assets originated or purchased with the sole objective of transferring their risk through securitisation when the transaction is part of an exit strategy or more generally when the portfolio reflects only a niche or marginal business for the lender.

### Default of the Protection Buyer

If the protection buyer defaults on the protection premium payment, this normally leads to an early termination of the transaction's credit protection period. In funded structures, the SPV would redeem the notes using proceeds from the charged assets (See *Charged Assets in Funded Structures*). However, investors remain exposed to the risk of not receiving their interest payments, which typically depend on the premium payments or other obligations of the protection buyer.

When the interest payments to the noteholders depend on the premium payments or other obligations of the protection buyer, Fitch will cap its ratings at the protection buyer's rating, unless the resulting counterparty risk is mitigated.

In some funded deals, the risk is mitigated by collateralizing the exposure to the protection buyer (e.g. reserve funds or advanced premium payments). The collateral typically covers the interest payments due to the noteholders over the next payment period, and the time needed to early terminate the transaction upon the default of the protection buyer and redeem the notes.

In unfunded transactions the exposure to the protection buyer is often mitigated by making the protection seller's payments conditional on receipt of the premium.

The potential exposure to the protection buyer in synthetic deals envisaging a "two-stage payment structure" is described in *Two-Stage Payments, Deferability of Notes and Conditional Reduction of Interest.*

Where the exposure to the protection buyer is so material that it cannot be mitigated, Fitch will cap the rating(s) at the protection buyer rating. This is the case for example of those transactions where the protection buyer is the issuer of the notes and the repayment of notes is an unsecured general obligation of the protection buyer (i.e. not collateralised by charged assets).

### Charged Assets in Funded Structures

Funded transactions are exposed to the risk of losing money upon default of the SPV's account bank or investments. When the funds are invested in securities, they are also exposed to market value risk if the securities have to be liquidated ahead of maturity.

Fitch will analyse these risks and will apply rating constraints in accordance with *Charged Assets* and *Excessive Direct Counterparty Exposure* in its *Structured Finance and Covered Bonds Counterparty Rating Criteria.*

### Termination Payments

An early termination of the CDS (or of the financial guarantee) following the default of the protection buyer may result in early termination costs due from the protection seller to the protection buyer. Fitch may assign ratings higher than the protection buyer's rating only:

- in funded and unfunded transactions where no early termination costs are due to the protection buyer under the term of the documentation; or
- in funded and unfunded transactions where the risk of senior termination costs to the protection buyer can be quantified upfront and factored in Fitch's analysis; or
- in funded transactions where the payment of the early termination costs to the protection buyer is subordinated to the redemption of the notes and there is sufficient legal comfort that the relevant transaction provisions ("flip clause") are enforceable.

For more details see *Structured Finance and Covered Bonds Counterparty Rating Criteria*.

If there are other early termination events that may result in senior termination costs but are not connected with the protection buyer default, Fitch will assign a rating only if those costs are quantifiable up front or sufficiently remote in the relevant rating scenario. For avoidance of doubt, termination events in relation to the protection seller default are out of the scope of the rating.

### Cash Flow Modelling and Structural Features

Credit enhancement in synthetic deals normally consists of subordination and/or synthetic excess spread (XS), defined as any positive or negative component or adjustment to the credit events that cannot be assessed by considering the reference asset losses alone.

For example, a transaction could provide that the protection payments due by the protection seller will be reduced by a pre-defined percentage of the outstanding reference portfolio in the reference period or other forms of synthetic excess spread (the synthetic XS).

Fitch will analyse the deal's payments in a cash-flow model only when they could be detrimental or beneficial to the relevant credit rating. This could for example be the case where synthetic XS acts as a first layer of protection or structures with complex credit event definitions, complex note amortization structures or complex payment flows.

In such cases Fitch will analyse the deal using a financial model, which may be derived from the ones in use for true sale deals for the relevant asset class.

Depending on the structure, the relevant modelling assumptions (e.g. default distributions, asset margins and prepayment rate) may not match those in the reference sector-specific criteria. For example, Fitch may apply bespoke default distributions where the ratings benefit from synthetic XS or where synthetic XS is specifically structured to counter the stresses applicable to true sale transactions. In this latter case, Fitch may also decline to rate the transaction or apply a rating cap.

### *Two-Stage Payments, Deferability of Notes and Conditional Reduction of Interest*

Under a two-stage payments structure, although the final claim of the protection buyer to the protection seller is defined as the ultimate asset loss (the loss on defaulted assets once the workout has been completed), the protection seller would first have to pre-fund a certain percentage of a defaulted exposure (the estimated loss under the documentation or the first-stage loss) when an asset default notice is served.

In the second stage, the final claim against the protection seller is determined by assessing the actual loss on the defaulted exposure (the ultimate loss). If the ultimate loss exceeds the first-stage loss, the protection seller will transfer additional funds to the protection buyer. If the first-stage loss exceeds the ultimate loss, the protection buyer will pay back the excess, plus interest (in some structures), to the protection seller.

Fitch's ratings for these structures address the likelihood of a final claim being made (i.e. payments at the end of the second stage) rather than a prefunding claim being made (i.e. payments at the end of the first stage). However, the ratings may be constrained by the additional risks that stem from the first-stage payments, namely the counterparty exposure to the protection buyer, the risk of loss of interests/premium and the risk of interest/premium deferral, as outlined below.

- If Fitch expects the protection buyer will have to make payments back to the protection seller in a specific rating scenario (i.e. if the loss Fitch associates with a specific rating scenario is lower than the first-stage loss), the resulting counterparty risk will constrain the ratings at the protection buyer's rating in the absence of adequate mitigants (e.g. up-front collateralization of the exposure to protection buyer or additional credit enhancement).
- The accumulation of asset default notices (i.e. payments in the first stage) may exceed the available credit enhancement and result in a reduction of the notional amount on which the protection seller interest/premium is calculated (in funded structures: the notes' balance). If the resulting interest loss is compensated at the second-stage payment, the compensation is part of the assessment of the exposure to the protection buyer discussed in the point above. If the loss of interest is not compensated at the second-stage payment, Fitch will consider it as a conditional reduction of interest that constrains the ratings (see Appendix 4 *Conditional Reduction of Interest and/or Principal*). In other words, Fitch will assign a certain rating only if, in the corresponding rating scenario, it does not expect a reduction of interest/premium by operation of the first-stage payments.
- Regardless of the presence of mitigants, these structures can achieve 'AA-sf' or higher ratings only if Fitch considers the interest deferral risk remote (see Appendix 4, *Deferability of Notes*).

When assessing the exposure to the protection buyer under a two-stage payment structure, Fitch may consider different assumptions from those assumed in the applicable sector-specific criteria.

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