

International Special Report

Criteria for Rating Japanese Distressed Real Estate Securitisations

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A Japanese translation of this report will be available shortly.

■ Summary

Analysing non-performing and sub-performing commercial real estate securitisations in Japan requires a different methodology than that developed by Fitch IBCA to analyse such assets in the U.S. and in Europe. For a detailed discussion of non-performing loan securitisations in these jurisdictions, see Fitch IBCA Research on "Securitizing Distressed Real Estate," date April 9, 1999, available on Fitch IBCA's web site at www.fitchibca.com.

This report describes the assets most likely to be included in such securitisations, presents Fitch IBCA's new methodology, and includes various structural considerations.

In the face of the deterioration of commercial and residential real estate in Japan following the burst of the bubble economy, Fitch IBCA believes that financial institutions and other owners of non-performing real estate loans (NPLs) will increasingly turn to securitization to rid balance sheets of mispriced assets. Securitisations of NPLs can be done either by the loan originator or the purchaser of these loans.

Fitch IBCA's methodology for rating non-performing mortgage loans is different from that used to evaluate pools of performing loans. To rate pools of performing mortgage loans, Fitch IBCA determines default probabilities and estimated recoveries based on statistical data. Losses at various stress levels equal the credit enhancement expected at each rating level. Preliminary credit enhancement levels are further refined based on loan and portfolio characteristics.

Fitch IBCA's methodology in the U.S. is more cash flow-driven and gives credit to sustainable cash flows generated from the underlying assets. In contrast, the agency's methodology for Italy is based primarily on statistical information. Such information includes data on the amounts and timing of resolutions of distressed assets by the applicable Italian courts covering almost 10 years.

Unlike the U.S., a substantial amount of non-performing properties in Japan may provide no cash flows. Therefore, investors rely primarily on the asset resolution process to be paid interest and repaid principal. In cases where there is evidence of sustainable cash flows, certain credit is given for such cash flows whilst considering various related risks.

Fitch IBCA has developed a methodology that is liquidation-driven. The special servicer or the asset owner usually provides historical data. The special servicer acts as a servicer on behalf of the owner of the assets, where a licensed servicer is required by law for certain categories of assets. The data include original book value, amount amortised, and amounts realised upon sale, as well as costs to sell or liquidate. Distressed asset liquidations take several forms, among them discounted payoffs, deeds in lieu of foreclosure, foreclosure and sale, sale of a loan, loans to a third party, or voluntary sale. The asset owner's or special servicer's strategy, the judicial process, lender remedies, and timing are some of the other factors reviewed. The data are used to determine loss severities. Increased stress scenarios are applied by multiplying loss severities for the higher rating levels. Non-performing pool analysis usually requires greater amounts of cash reserved upfront than performing pools because of resolution costs and uncertain cash flows for loans in default. As a result, Fitch IBCA relies on cash, via credit for sustainable cash flow or reserves for interest payments and foreclosure/liquidation costs that are set aside upon issuance of the securities.

Non-performing analysis relies heavily on the legal framework, specifically property laws, lender rights, and treatment of bankruptcy.

Certain financial and legal features typically not seen in performing pools are provided for in NPLs to reinforce the safety of the return to debtholders. These safety measures include: payment of all excess cash flow to amortise debt before equity receives its return; amortisation of specified levels of senior debt before the subordinate debt receives interest payments; engagement of a special servicer and also the employment of various consultants and specialists, such as real estate valuers, lawyers, accountants, and due diligence firms, among others, with the hands-on skills needed to resolve problem loans; and an incentive compensation structure, wherein the special servicer or the asset owner typically has an equity stake as motivation to maximise returns on the underlying assets.

This report serves as a guideline for investors, investment bankers, and issuers in structuring or evaluating transactions. Each transaction has unique characteristics that may require special consideration or analysis. Fitch IBCA encourages dialogue regarding characteristics of particular pools.

■ Japanese Real Estate Market

Following the burst of the bubble economy in 1991 and 1992, prices for commercial real estate have decreased significantly. Prices for commercial and residential land have fallen more than 75% and more than 50%, respectively, from the peak in 1991, with some regional markets in Japan performing worse than others. Prices have been falling primarily due to weak demand. Falling prices, the recession, and the unavailability of bank financing (credit crunch) resulted in real estate developers, owners, investors, construction companies, and non-banks (which acted as lenders and buyers in the sector) having great difficulty financing, rolling over, or servicing loans with the result that many defaulted.

There is no reliable estimate for the size of the total market represented by non-performing real estate loans, either residential or commercial. The current estimate of the total amount of bad loans in the Japanese banking system, which is between ¥80 trillion to ¥100 trillion, suggests the potential scale of the problem. Allegedly, a substantial portion of such loans is secured by real estate. This amount includes the approximately ¥15 trillion in defaulted loans purchased from financial institutions and held by Credit Cooperative Purchase Co.

The abundance of these assets has created good investment opportunities for foreign investors. Such investors are predominantly from the U.S., some of which participated in the resolution of Resolution Trust Corp.'s (RTC) assets. Some also have NPL experience in Europe and Asia. Foreign investors acquired the equivalent of approximately US\$2 billion of Japanese NPLs in 1998.

■ General Methodology

Fitch IBCA's non-performing pool analysis relies heavily on real estate fundamentals. Fitch IBCA selects a fairly large sample size and undertakes an in-depth review of asset characteristics.

Cash flow from a non-performing asset may vary from a situation with no cash flow to some cash flow amount, depending on the circumstances. Therefore, site inspections are required for a larger number of assets and a greater percentage by book value than those usually undertaken for performing pools. Inspections involve a review of occupancy levels, tenancies, property uses, rents, market conditions, general and specific location, and physical condition, as well as accuracy of site inspection reports submitted by due diligence firms and real estate valuers. File reviews gauge the quality of the collateral and accuracy of information.

Always important, but more so in the liquidation approach, is the past experience and level of expertise of the special servicer or workout team assembled by the asset owner. To the extent that there is no income production from the assets, there is no cushion available to pay the bondholders regularly. Therefore, the special servicer does not have the luxury of slowing down its liquidation process. However, a large and diversified portfolio mitigates such concern.

■ Qualitative Factors

The qualitative factors that Fitch IBCA considers when rating a pool of NPLs involve two distinct risk categories — structural and real estate. Structural risks include the legal, tax, regulatory, financial, and management issues associated with the deal. Real estate risks relate to the quality of the underlying collateral securing the loans.

Structural

Positives

- Large equity stake by issuer.
- Pool diversification (loan and borrower).
- Quality workout teams of the asset owner or special servicer.
- Incentivised servicer or asset owner with equity stake.
- High-quality and sophisticated management systems.
- Strong representations and warranties backed by a highly rated entity.
- Detailed and organised due diligence files.
- Bankruptcy-remote special purpose vehicles (SPVs) and structure.
- High incidental cash flows (agreed payments by borrowers and rent attachments, among other things).
- Trustee, acting on behalf of investors, has a clear first priority security interest over the assets.

Negatives

- Debt represents a high percentage of acquisition costs.
- Pool concentrations (borrower and geographic).
- Below-average special servicer/workout teams.
- Flat servicing fee with limited incentives.
- Weak representations and warranties.
- Incomplete due diligence files.
- Weak bankruptcy-remoteness structure.
- Investors, through the trustee, have unsatisfactory security interest over the assets.

- Little or no incremental cash flow, as it depends solely on resolutions.

Real Estate

Positives

- Geographic diversity.
- Well maintained assets in good locations.
- Assets with good cash flow and investment performance.
- Property in established investment markets with proven liquidity.
- Efficient market pricing with established valuation practices.
- Stabilising or improving market conditions for certain types of assets within certain geographical regions.
- No environmental contamination issues relating to land or buildings.
- Clean title.
- Clean first lien and few other encumbrances.
- Large number of relatively liquid, high-demand property types, such as apartment dwellings.
- Bulk of properties in high-demand zones (capital and regional cities).

Negatives

- Poor quality, poorly maintained assets.
- Assets with low tenancy rates and poor cash flow performance.
- High concentration of portfolio by size of asset, type, or location (other than Tokyo).
- Numerous single purpose or special use properties in a depressed asset class.
- Weak market demand and liquidity for property type and location.
- Lack of market transparency in valuating or pricing properties (lack of comparable assets, low historical liquidity, non-arms-length).
- Contamination risk.
- Unclear property title.
- Multi-layered collateral interests.
- Involvement of organised crime.

■ Asset Characteristics

Asset characteristics affecting resolution in terms of proceeds and timing include the property type and the location of the property.

Property types consist of office, residential, commercial, retail, hotel, land, industrial, agricultural, and other, such as recreational and golf courses.

Office

There are many sizes and grades of quality for office buildings. For instance, for “pencil” office buildings, which are buildings with small footprints, it may be hard to find tenants and possible investors, depending on the quality and the location. The Tokyo office market is the largest office market in the world; however, due to the burst of the bubble economy, rents in some markets have fallen 75%–80% since the late 1980s and overall office rents have fallen by more than 50% from the 1991 peak. In a small portion of office areas throughout Japan, including Tokyo, rents seem to have stabilised over 1998 and 1999 levels. The current average vacancy rates in Tokyo range from 5%–8% for the central five wards to 10% for the total of 23 wards.

Residential

Residential assets are quicker to resolve than any other type of asset. Single-family condos and regular single-family homes are the easiest to resolve. One-room condos (“mansion” in Japanese and the equivalent of a studio in the U.S.) and investor properties are harder to resolve, and vacation homes are even harder to resolve. Liquidity is also a factor, as smaller assets which are less likely to require external funding, tend to sell more quickly.

Falling prices in the residential market, especially for condominiums, are due to mis-pricing and declining demand during the post-bubble years. Demand has been shaped by the falling consumer confidence in the economy. However, during the last few months, demand has risen due to the low interest rate levels and related tax benefits from the government. This has been partially offset by an increase in supply through the massive sale of units by the condominium developers in order to repay debt and their balance sheets, especially as a result of the unwillingness of Japanese banks to extend loans to such developers during the post-bubble economy years, the so-called credit crunch. Condominium prices have fallen more than 50% from peak values in 1991 and are at their lowest levels since 1987 in major cities such as Yokohama, Osaka, and, especially, Tokyo.

Commercial

Commercial assets include restaurants and social/entertainment buildings. The latter include bars, pachinko parlors, Karaoke halls, “game” centers, private clubs, and hostess clubs, among others. Such properties are likely to exist in non-performing loan portfolios due to owner default and, particularly, reduced business in the post-bubble economy years. Commercial properties are among the more challenging assets to resolve, as

organised crime is sometimes involved in entertainment buildings and many tenants are involved in cash-only businesses, for which it is hard to estimate or give credit to sustainable cash flows.

Retail

Resolution of retail assets depends on the size, location, and alternative uses of the property. In the post-bubble years, many retailers went bankrupt or restructured their holdings. The resulting sale to the market of retail properties has boosted oversupply and, consequently, lowered prices and rents for such types of assets. There are differences in prices and rents, depending on location and traffic.

Hotels

There are various categories of hotels that can be present in a non-performing portfolio, including city hotels, business hotels, capsule hotels, tourist hotels, and love hotels.

City hotels are regular Western-style hotels with larger rooms, restaurants, and other amenities. Business hotels and capsule hotels also may be associated with non-performing loans. In Japan, the concept of a business hotel offers cheaper accommodation than city hotels, emphasising efficiency and no-frills accommodation. Capsule hotels involve the renting out of a small bed and shower facilities for a night’s stay and cater primarily to city workers that miss the last evening train to their suburban homes.

Another category of hotels, tourist hotels, may also have a high incidence of NPLs. These include traditional-looking hotels (ryokan) and hotels with mineral hot baths (onsen). The so-called love hotels offer special purpose accommodation for stays of short duration and are the most likely of this type of asset to be associated with an NPL because such hotels usually have a short operating history and usually rely heavily on non-bank lending with interest rates higher than those charged by the banks.

Except for city hotels, it is generally hard to find investors in hotel properties, particularly tourist hotels. Prices of hotel properties have decreased due to overall weak demand. Average daily rates for city hotels have been falling due to increased price competition. Competition has increased partly from the continuing entrance to the market of foreign hotel operators. Occupancy for city hotels has remained flat but has decreased in the case of business hotels and tourist hotels.

Land

Land is a very easy asset to resolve because it is easy to evaluate and there are no complications due to tenants and the simple legal structure, unless it is over-priced and in an area in which nobody wants to invest.

Industrial

With the exception of agricultural properties, industrial assets are the hardest to resolve because the use of the property may be highly specialised, thus making any alternative use of the building or land difficult if not impossible. An alternative is to demolish and erect a new building with a more popular use. However, such an alternative is constrained by zoning restrictions, Japanese firms not investing in new capacity, industrial estates constrained by location and lack of traffic. In addition, environmental risks may complicate the evaluation and resolution of these assets.

Prices for industrial properties also decreased in the post-bubble years due to restructuring in the industrial sector.

Agricultural

Agricultural properties are often the hardest to resolve because it is difficult to find a successor to operate the asset and alternative use is sometimes prohibited by zoning regulations. However, resolution of the asset depends on the location, because if the agricultural property is located in an urban area, it is relatively easy to obtain the authorities' approval to change zoning to other uses, such as commercial or residential use. In this case, resolution may be quicker.

Prices for agricultural land also have decreased due to weak competitiveness of the agricultural business and falling land prices, which are the major component of the value of agricultural properties.

Other

The assets include golf courses, private schools, parking lots, warehousing, recreational, and forest, among others.

In Japan, memberships to golf courses are often sold prior to completion of the project as a way to fund costs of construction. Such membership confers to the member's rights akin to an equity holder. In the event that ownership of the golf course changes hands, the existing members will lose all their rights. As a result, it is very likely that litigation by the original members of the golf course will prolong the resolution process. Many golf courses have had

changes in their ownership structure as a result of financial difficulty experienced by their original owners due to the falling trading prices of memberships resulting from the post-bubble recession. Additionally, it is hard to find investors because of the scarcity of golf course operators.

It is legally possible to resolve assets involving private schools. However, such resolution is highly subject to interference by the community served by such schools.

Parking lots are treated as land and tend to be easy to resolve.

Property Locations

Location of the subject property within the 23 wards of Tokyo implies comparatively better resolution in terms of value and timing. Areas outside the 23 wards of Tokyo, Kanagawa, Saitama, and Chiba offer the second best expected resolutions. The third best category applies to assets located in the Kansai area, which includes Osaka, Kyoto, and Kobe. The fourth best category involves major local cities, such as Sapporo, Sendai, Nagoya, and Fukuoka. Finally, location of the asset outside of these areas implies that the resolution will likely take longer and at lower resolution prices due to weak demand and lower liquidity.

■ Asset Resolution

The following are possibilities for asset resolution.

- Foreclosure/court auction.
- Voluntary sale.
- Discounted pay off.
- Real estate owned (via credit bid or deed in lieu of foreclosure, sometimes simply called "deed in lieu").

Some special servicers and asset owners typically resolve assets via the foreclosure and court auction process. Other special servicers and asset owners may use any of the other three methods more often.

Foreclosure

Filing a petition to foreclose takes up to one month and must be placed with the Court of Execution that has jurisdiction over the area the affected property is located. If such petition is in order, in approximately two to three weeks, an Order of Seizure will be granted. The sale of the property takes place through a court auction. The Court of Execution will authorise the sale of a property through auction procedures (keibai kaishi kettei). Upon authorisation, an enforceable instrument is provided to the borrower and the owner on the property. This instrument is recorded at the registrar, and seizure becomes

effective at this point or upon delivery of the seizure notice.

The relevant Court of Execution will notify the public and the creditors of the time by which demands must be filed, have the court marshal review the condition of the property, and a court appraiser value the property. This takes approximately six months. The court determines the minimum price after reviewing the reports from the marshal and the appraiser.

Japanese law provides for four types of sale, including a bid (designated date), a period bid, auction, and special sale. The auction method is the most common. Bidders must deposit 20% of the minimum purchase price established by the court. The court determines the method of sale, date, time, and place of the auction. The court marshal conducts the auction. Once the highest bid is made, the court will conduct a hearing (baikyaku kettei kijitu) within one week to decide whether to accept such bid. If accepted, the title of the property passes from the borrower to the purchaser in exchange for the bid price. The proceeds from the sale are then distributed to the owner of the mortgage loan. The entire foreclosure process may take one year to four years because of complicated lien position and illiquidity of certain segments of the real estate market. It takes nine to 12 months for one auction and longer for multiple auctions when the minimum bid price is not met or for exceptionally difficult assets.

Voluntary Sale

This process involves the sale of the property after the loan obligor and the other lien holders provide their permission. The incentive for the loan obligor and the other lien holders to provide such permission is the expectation that the sale price of a property sold outside the auction process, i.e. direct sale, should be higher than the sale price realised through auction. Therefore, lien holders are more likely to have their claims satisfied and the loan obligor is more likely to receive any residual amounts. Such process is also quicker than the court auction process.

Although such resolution results in much higher realisation value, as well as quicker realisation, Fitch IBCA's analysis does not usually rely on voluntary sale because of the possibility that another lien holder may not give permission for such voluntary sale; permission by all lienholders is required. However, the strategy of the asset owner or special servicer may include resolution by voluntary sale where due diligence before investment and subsequent negotiations with the loan obligor warrant. Thus, the

actual performance of these assets should be better than what Fitch IBCA's analysis took as a conservative evaluation.

Discounted Pay Off

A discounted pay off (DPO) involves the agreement between the loan obligor and the asset owner, where the debt owed to the asset owner is satisfied upon the repayment by the obligor of a portion of the loan outstanding. Thus, the asset owner receives cash and releases the property from the asset owner's lien. It follows that no permission from other lienholders is necessary. The asset owner's or special servicer's strategy may include resolution by DPO. However, Fitch IBCA's expected resolution value does not give credit to the DPO unless warranted by due diligence or negotiations because the loan obligor, by definition, is delinquent.

Real Estate Owned

The asset owner's or special servicer's strategy includes resolution by real estate owned via a credit bid at a foreclosure auction or a deed in lieu. The asset owner's, special servicer's, and Fitch IBCA's expected resolution values may include real estate owned for certain assets. This is because real estate owned in a foreclosure auction eliminates junior lienholders, and loan obligor residual claims. Additionally, the asset owner will end up with an unencumbered asset.

The mechanics of real estate owned are as follows:

- Suppose an original loan of ¥100 million was sold by bank A to another entity (the purchaser) for ¥50 million and there is a second mortgage on the property held by bank B for ¥40 million. Upon sale of the loan, the purchaser becomes the first mortgagee for ¥100 million.
- Upon foreclosure where the minimum bid price is set at ¥50 million by court. If a third-party bid is accepted for, say, ¥120 million, then the purchaser will be repaid ¥100 million and the second lienholder will be repaid ¥20 million.
- In a case where the purchaser credit bids ¥50 million, assuming the minimum bid price is ¥50 million, if the bid is accepted by court, the purchaser pays ¥50 million in cash to the court and the court pays the purchaser ¥50 million in cash as the first mortgagee. There is no money left to repay the second lienholder and loan obligor. The auction is finished and the court declares the case resolved and all claims disappear, including the unsatisfied claims of the second lienholder and loan obligor. Therefore, the purchaser can now enjoy full ownership of the unencumbered asset. The purchaser can then

freely sell the property to third parties outside the auction process, realising a higher price.

- Please note that the purchaser will credit bid only for ¥50 million. If another entity bids more than ¥50 million, for instance ¥70 million, the purchaser would enjoy the ¥20 million as profit being the difference between aggregate proceeds of ¥70 million and the ¥50 million paid to acquire the first mortgage of ¥100 million. Thus, the purchaser would not bid in such a case.
- If the court sets the minimum bid below ¥50 million, for instance ¥40 million, the purchaser will bid ¥50 million to avoid any loss incurred through the real estate owned auction process.
- The minimum bid price shall be set solely by the court.
- In order for the court to set the minimum bid price, the court needs to appoint an official appraiser, which will result in cost and time delay as it takes six months, on average, to complete such an evaluation.

■ Asset Evaluation

The starting point of the evaluation is the non-performing loan. Related concepts include the borrower, collateral, legal status, and resolution.

Borrower

- Analysis of the reason for delinquency and the state of the borrower's business (performing, in bankruptcy, reorganisation, or already dissolved).
- Whether the borrower is cooperative with the servicer and whether the borrower is accessible.
- The identity of key persons behind the borrower.
- Any prior criminal record of such person(s).
- Any presence of organised crime within the borrower organisation.
- Type of business and corporate structure, business history, credit relationships.
- If the borrower is an individual, employment history and source of income are reviewed.
- Special servicers investigate for existence of hidden assets, collateral, sources of liquidity.

Collateral

- Type of collateral, including its marketability, and liquidity of the related market.
- Current use, quality, capital investment required, existence and type of tenants, and alternative uses.
- Lien position. Determine the number of lienholders at the various levels (first position or second position, etc.) and the relative position of

the lender. Ideally, the lender will have a clean first lien on the land and building with no other creditors with a first lien position.

- Presence of organised crime.

Legal Status

- Loan not worked out, in foreclosure, or resolved.
- Legal status of the borrower.
- Other pending lawsuits by other creditors or lienholders, among others.

Resolution

- Determine and prioritise negotiation/resolution strategies.
- Identify potential investors (type of investors).
- Negotiate with loan obligors, if a part of strategies.

Evaluation Tools

Sales Comparison Approach

In Japan, in general, evaluation of real estate historically has been performed based only on sales comparisons (sales comps). Sales comps refers to the actual price that a comparable property fetches upon sale. Such price is usually reported by a broker. Such method is effective especially when recent sales comps are available and for properties substantially similar in location, type, etc. with the subject property.

During the bubble, even a property that was not generating cash flow was still valued highly based on the sales comps. Sales comps valuations predominated before the bursting of Japan's asset bubble and are still used in the evaluation of practically any type of property and are particularly popular in the evaluation of properties consisting of land only.

Appraisers and real estate professionals in the process of calculating the value of the property based on the sales comp approach consult the Koji and Rosenka directories. In Japan, these directories show the land prices for anywhere in Japan and provide tools to adjust these prices in order to account for the relative location of the property to be appraised. For instance, these adjustment tools factor in the value of the street that the property is facing (or streets if it is a corner property). Both directories are created and maintained by the government. The Rosenka is for tax purposes and, during the post-bubble years, is usually equal to 80% of the Koji price. Koji price (Koji kakaku) is the index of land value and provides an indication of price. Before the break of the bubble

economy, Koji price was usually lower than market price. However, after the break of the bubble, because these two directories are not revised in a timely manner and the land values were decreasing rapidly, prices resulted in these directories lagging behind market prices at higher levels, although Koji price may still sometimes exceed the market price.

Income Approach

For a detailed description of this approach, see Fitch IBCA Research on “Rating Single-Borrower Commercial Mortgage Issues,” dated April 30, 1999, available on Fitch IBCA’s web site at www.fitchibca.com. The collapse of the bubble economy in the early 1990s brought real estate prices down and led to wider use of the income approach (which is very prevalent in the U.S. but, in Japan, even though known, it has not generally been used) in the case of properties that generate sustainable cash flows. It has been especially popular in evaluating office buildings.

Alternative Use Approach

This approach pertains to situations where the current building is not productive and has no possible alternative uses. The approach assumes that an investor intends to demolish the current building and erect a new building in its place with a use better suited to the location and, therefore, includes assumptions about demolition and construction costs as well as income levels that can be generated from the asset. The cash flow expected to be generated from this new hypothetical building results in the evaluation price under this new method. This method is not common.

■ **Servicer Expertise and Maximum Return on Assets**

Practices and styles vary between special servicers and asset owners in Japan. Some may rely almost exclusively on the foreclosure process to resolve the assets. Other servicers may be more inclined to workout the assets in a variety of ways being consistent with their capabilities and desire to maximise returns.

The importance of the workout team of the asset owner or the special servicer cannot be overemphasised in these securitisations. This is the reason Fitch IBCA undertakes a detailed due diligence review of the workout team of the asset owner or special servicer. Part of the due diligence is to visit many subject properties with representatives of the workout team of the asset owner or the special servicer and the asset managers and discuss in detail their views on each such property. (Fitch IBCA Research on

“Commercial Mortgage Servicer Rating Criteria,” which will be available later this year, will provide a detailed discussion on special servicing.)

A special servicer or asset owner handles defaulted loans much like the special servicer in performing loan pools. However, in the case of non-performing assets, the special servicer’s expertise is especially critical to the transaction’s success. Emphasis is placed on the ability to work with delinquent borrowers, overseeing repossessions and managing and disposing of assets. The ability of a special servicer or asset owner to maximise the return on assets will rely on its presence in the marketplace, local legal procedures, and market customs. Other important considerations include knowledge of and access to skilled legal professionals, real estate valuers, managers, and brokers, all of whose services are necessary to the resolution. A large network of such service providers is desirable because it avails of local market expertise and facilitates the creation of large, diversified asset portfolios. The ability to source appropriate assets and to purchase assets at a reasonable price are important considerations. Additionally, the quality and sophistication of management systems of the special servicer are important because failure to give notice or make filings within certain time frames, track communications with borrowers, follow-up timely receipts of assigned operating income or rents, etc. could prejudice resolution timing as well as resolution values.

Once chosen, a qualified special servicer should be given a great deal of latitude and offered incentives to improve returns. Since real estate properties have unique characteristics, it is very difficult to regulate a servicer’s workout or foreclosure procedures. However, if the latitude is coupled with the right incentives, the servicer is encouraged to maintain a high level of service, which maximises recoveries and benefits debtholders. The most effective servicer incentive is having its own capital at stake. Nevertheless, other structures, such as one paying large performance fees upon debt retirement, offer significant incentives as well.

■ **Organised Crime**

A feature of real estate in Japan (especially commercial real estate) is the involvement of organised crime. Organised crime can be present at the borrower, creditor, and/or tenant level.

On the borrower level if a company certain key employees, or an individual is affiliated with organised crime, it may scare away prospective investors, even in a foreclosure process.

On the creditor level, creditors of the borrower may include organised crime. Sometimes, when a borrower experiences financial difficulties and may not be able to continue repayment of loan, the borrower may obtain a loan from elements of organised crime in the hope of preventing the lender from foreclosing on the property. As a result, organised crime obtains a lien, leasehold right, or other legal right on the property. Fitch IBCA carefully examines each such asset for signs that would indicate involvement by organised crime, such as presence of multiple liens in the “Otsu ku” and signs of extraordinary ownership in the “Koh ku,” which are sections in the land/building registry, “Tokibo Tohon.” Such rights may effectively delay the foreclosure process for several months. Additionally, such presence may scare away prospective investors. On the tenant level, elements of organised crime can become tenants legally or illegally.

As a legal tenant, elements of organised crime may have some relationship with the borrower and will avail of a valid tenancy agreement. In some cases, the borrower is trying to prevent other creditors from foreclosing; thus, it invites organised crime to make the property unappetising to prospective investors. Organised crime elements usually use the right of short-term leasehold (Tanki Chin-shaku Ken). The difference of this short-term leasehold from “regular” leaseholds is that it is registered with the Legal Affairs Bureau. Even a foreclosure process or a real estate owned cannot eliminate such short-term leasehold. The presence of such short-term leasehold is usually a red flag, as it indicates the presence of organised crime and may scare away prospective investors. Therefore, in practice, the existence of short-term leaseholds prevents foreclosure.

As an illegal occupant or tenant, especially when abandoned by the borrower, elements of organised crime may enter a property and occupy it, sometimes with the intention of obstructing the foreclosure process. The lender has the right to expel the illegal occupants and may do so with the help of the police authorities and the court system. The existence of organised crime in a property in the form of an owner, creditor, or tenant generally increases the time required to resolve an asset. This is because courts and judicial procedures, while slower than direct negotiations, are the only reliable way of resolving these assets. Assets tainted by organised crime will also reduce the resolution proceeds from affected assets as even in foreclosure auction, the pool of potential bidders is reduced. Proper due diligence by the asset owner or its servicer before purchase ensure

that the timing and reduced resolution values of these assets are taken into account before such asset is purchased.

■ Earthquake Risk

This is an issue in earthquake-prone Japan, especially for performing commercial mortgage-backed securities (CMBS). However, for non-performing CMBS, no explicit coverage of such risk is necessary.

Typically, according to tradition, Japanese real estate asset investors do not factor earthquake risk into their evaluation of the purchase price of non-performing assets. Only 15% of all properties in Japan are covered by earthquake insurance. Therefore, Fitch IBCA’s estimation of the price that asset investors will be willing to pay does not explicitly take into consideration earthquake risk.

However, if an earthquake occurs before assets have been resolved, any damaged assets may be worth less than expected, thus exposing securitisation investors to possible losses. However, Fitch IBCA’s typical asset evaluation stresses the amount high enough that the value of the land represents a significant component of such amount. Also non-performing pools are likely to consist of a large number of properties (in the hundreds) and to be significantly diversified geographically. This further reduces the risk that an earthquake will affect a significant amount of the pool. In addition, it is unlikely that the pools have a significant concentration of large buildings, such as office buildings, for which earthquake damages can be costly.

■ Structural Considerations

Equity Contribution

Significant equity is critical in Fitch IBCA’s analysis, as this translates into a strong commitment by the asset owner and special servicer for a successful transaction. With the acquisition price as a good determinant of the value of any asset, the equity contribution relates to the loan-to-value ratio for the transaction as a whole and serves as a second test to debt service coverage requirements. Less relevant, but often used as a benchmark, is the loan-to-original book value ratio.

Payment of Excess Cash Flow to Amortise Debt

Portfolio cash flow is income from the assets (such as interest and principal payments on the loans and attached rent income, if any), net operating income from repossessed property owned by the asset owner, and proceeds of property or loan sales) less portfolio

expenses (such as interest payment on the underlying debt, asset management and servicing fees, and distributions to pay the asset owner's income taxes). Non-performing pools typically provide for all portfolio cash flow to be paid to extinguish debt prior to any return of equity to the issuers. Thus, the equity holder has a significant incentive to achieve a resolution at maximum possible values, as it receives no return on its equity until the debt is fully paid.

Senior Debt Amortisation Test

Because investment-grade securities have a higher standard of repayment certainty than speculative grade debt, Fitch IBCA expects cash flow available after interest payments on the securities to be distributed sequentially to the senior debt and to the junior or speculative grade securities. Furthermore, interest on non-investment-grade debt typically is deferred unless certain tests are met, which include meeting specified senior debt amortisation levels by certain time frames and satisfying coverage tests.

Release Provisions

Non-performing transactions ideally provide for assets to be sold, on a cumulative basis, above certain agreed-on prices to prevent or limit liquidation of assets at below-market prices. This feature maximises returns from property owned through repossession or loan dispositions.

Reserve Accounts

Reserve accounts for interest, deferred maintenance, asset resolution costs, transaction fee reserves, management, tax, and insurance costs for real estate owned properties are funded simultaneous at issuance. These reserve accounts offer additional protection to debtholders, ensuring payment of the underlying debt during periods of uncertain income availability, usually the initial years. Equivalently, Fitch IBCA may give credit to a certain portion of cash flows that are deemed sustainable.

Liquidity Facility

As an alternative to reserve accounts or to the availability of sustainable cash flows, non-performing portfolios may provide a liquidity facility to make up periodic cash shortfalls where proceeds from resolutions are not sufficient to make bond interest payments.

Representations and Warranties

The original seller of the assets typically makes certain representations to the asset owner, such as mortgage validation and enforceability, mortgage priority, conformance with building codes and planning laws, existence of adequate hazard and title

insurance policies, payment of real estate taxes, and accuracy of investor files. Other important representations and warranties include the following: absence of organised crime associated with the asset (difficult to prove knowledge of, especially at the tenant level); that statutes of limitations have not run out on the mortgage(s); that there are no tax liens; and proper disclosure of other liens on the property, etc. Upon breach of any of these representations and warranties it is usually the seller that indemnifies the purchaser, so the reputation and sophistication of the seller is important to the process of sourcing good assets.

■ Fitch IBCA's Modelling and Credit Analysis Based on Liquidation Value

Evaluation of Resolution Amounts

Fitch IBCA divides all assets between special assets (assets to be resolved via DPO, real estate owned, and voluntary sale) and foreclosure assets (assets to be resolved via foreclosure).

Fitch IBCA defines a specific pool of assets that it will analyse on an asset-by-asset basis. That pool usually represents at least 40% of the overall securitised assets and covers a number of the largest borrower concentrations in such pool. The choice of the exact amount depends on the overall number of assets, the number of borrowers, and the existence of large concentrations on an asset or on a borrower basis, among other things. For a subset of that pool, Fitch IBCA will visit the properties and review the files of the asset owner on each asset. For the remainder of that pool, adjustments to the sample are extrapolated to the remaining assets outside the selected pool, which are adjusted on an aggregate basis by using results validated during the asset-by-asset analysis of the sample.

The asset-by-asset analysis calculates the value of the asset by considering the worst-case resolution scenario thus consistent with an 'AAA' scenario in terms of the amount and timing of resolutions. During this analysis, Fitch IBCA discusses its assumptions and findings with the asset owner and/or the special servicer to consider its point of view. The agency's evaluation amounts also take into consideration the possibility of voluntary payments made by the borrower for principal owned under the loan.

After the due diligence of the special servicer and/or asset owner the agency determines which rating scenario, in its view, is consistent with the special servicer's and/or asset owner's overall method of

evaluating assets. Such evaluation corresponds to expected values and resolution cash flows before stressing by either amount or timing.

From the assets analysed, the agency analysts compute the value-adjustment ratio, which is the ratio between the asset owner's or special servicer's valuation amount and Fitch IBCA's 'AAA' level.

Then, given the value-adjustment ratio for the 'AAA' and base case scenarios, Fitch IBCA's model will extrapolate value-adjustment ratios for the rating levels between the 'AAA' and 'BBB', 'A', and 'AA' levels.

Fitch IBCA will stress the asset owner's or special servicer's evaluation amount for assets analysed on an aggregate basis, for each relevant rating scenario, by adjusting the special servicer's evaluation amount by the appropriate value-adjustment ratio for that rating scenario.

Timing of Resolution Amounts for Special Assets

Fitch IBCA analyses the expected timing of receipt of resolution amounts for special assets as follows:

- First, the lowering of the expected resolution amounts from the asset owner's or special servicer's levels, pursuant to the various rating scenarios, automatically lengthening the repayment term of the securities.
- Second, Fitch IBCA stresses timing for special assets by taking, usually, two times the expected time that the asset owner or special servicer believes is necessary for an asset to be resolved, to determine the expected resolution timing under an 'AAA' scenario.
- Then, given the expected resolution time for the 'AAA' and base rating levels, Fitch IBCA's model calculates stressed resolution times for the rating levels between the 'AAA' and other rating levels.

Timing of Resolution Amounts for Foreclosure Assets

The agency determines the expected timing of receipt of resolution amounts for foreclosure assets by applying the table below. Typically, it takes nine to 12 months to file for foreclosure and reach the bid stage. Thus, Fitch IBCA assumes that it takes six months to file for foreclosure and, once the foreclosure process starts, another six months to reach the bid stage. Each additional bid cycle takes six months at most. Fitch IBCA assumes that it takes repeated bids to sell the property at the higher rating levels. Thus, the resolution time for assets already in

foreclosure is a function of the six months to file (if not done yet), the six months to start the bids, and then a multiple of six months corresponding to a number of bids according to that particular rating scenario.

Cash Flow Model

Fitch IBCA will adjust the cash flow model for various rating scenarios, which either the arranger/special servicer or the agency prepared, by incorporating the following: Fitch IBCA's asset-by-asset valuation amounts for special assets; the asset owner's or special servicer's adjusted valuation amounts for remaining special assets and foreclosure assets; and the stressed resolution times for special assets and foreclosure assets.

The adjusted cash flow model will show, for each rating scenario the amount of each tranche actually repaid within the arranger's original time frame. A shortfall for a tranche will be the difference between the principal and interest amount for that tranche that is expected by investors and the amount actually paid. The sum of shortfalls, if any, for all tranches constitutes the credit enhancement necessary for that rating level.

■ Fitch IBCA's Modelling and Credit Analysis Based on Credit for Sustainable Cash Flows

This section discusses Fitch IBCA's evaluation of sustainable income received from certain properties. The credit given will reduce the liquidity reserves needed to pay interest on the bonds during interest shortfall periods.

To the extent that Fitch IBCA is provided with projected cash flows over the life of the securitisation, substantiated with historical data that these cash flows are sustainable, Fitch IBCA will give credit for all cash flows expected to be received by the stressed expected asset resolution date, after making two adjustments to stress the amounts and account for borrower risk.

Stressing Timing for Foreclosure Assets*

Rating Scenarios	Number of Bids	Filed Already	Not Filed Yet
'BB'			
'BBB'	1	12	18
'A'	2	18	24
'AA'	3	24	30
'AAA'	4	30	36

*Each bid takes six months.

Adjustment of Cash Flows to a Conservative Level

The agency determines whether the asset owner's or special servicer's projected cash flows are consistent with an investment-grade scenario (at least 'BBB'). If not, Fitch IBCA will adjust such cash flows, via a cash flow-adjustment ratio. Please note that no stressing is necessary across rating levels because these amounts are used for liquidity as opposed to repayment of principal.

The agency performs this evaluation on an asset-by-asset basis for a specific pool of assets. That pool corresponds to assets with at least three months of cash collections, assets where the special servicer has attached rents, and assets with the largest expected cumulative cash flows.

Fitch IBCA will calculate an average of all cash flow-adjustment ratios derived from the analysis of that pool. With respect to projected cash flows, corresponding to assets outside that specific pool, Fitch IBCA performs an aggregate analysis by applying this average cash flow-adjustment ratio.

Adjustment to Account for Borrower Risk

Following the adjustment mentioned in the previous section, there is no adjustment for income collected directly by the special servicer from the tenants. However, for income collected by the borrower and then remitted to the special servicer, for all investment-grade scenarios, Fitch IBCA makes an adjustment to such income. The adjustment is in the form of subtraction of an amount corresponding from 19 to 16 months under 'AAA' to 'BBB' scenarios, respectively, from the expected cumulative cash flows. This is because at the worst case, there is the risk that the borrower engages in "foul play" and goes bankrupt.

Risk of Foul Play

Typically, actions of a non-bankrupt borrower considered foul play include fraud, under-reporting of income, and allowing the properties to waste. The agency's adjustment to the expected cash flows consists of an amount corresponding from six to three months under 'AAA' to 'BBB' scenarios, respectively.

The adjustment amount was derived as follows: if the borrower acts fraudulently against the special servicer, the asset owner, as the new lender, can accelerate the loan. It is most likely that the borrower will be unable to comply with such acceleration, given that the borrower has already defaulted under the loan in the past. The inability of the borrower to

comply with the acceleration will constitute failure to comply with the loan agreement, and this will empower the asset owner, as the new lender, to go to the court and file for seizure of rents and liquidation of the borrower. The agency understands that it takes one month to two months for rents to be seized after filing. Thus, Fitch IBCA assumed two months at the worst case. Additionally, Fitch IBCA assumes that, in order for the special servicer to detect the problem and complete an investigation, it will take, under the worst case:

- 'AAA' Scenario — Four months.
- 'AA' Scenario — Three months.
- 'A' Scenario — Two months.
- 'BBB' Scenario — One month.

Risk of Bankruptcy by the Borrower

It is likely for a borrower to go bankrupt during the term of the securitisation, given that the borrower has already defaulted under the loan. Fitch IBCA accounts for that risk by subtracting an amount from the expected cash flows corresponding to x months penalty and an additional 12 months penalty to address commingling risk and bankruptcy risk, respectively.

Commingling risk refers to the risk where any cash flows in the possession of the borrower and not remitted yet to the asset owner and special servicer may be lost upon the bankruptcy of the borrower. The agency ascertains when collections are remitted from the borrowers to the asset owner and special servicer, on average, and that time determines the x-month penalty. Of course, this risk does not apply to income and rent attachments.

After filing for bankruptcy, it is highly likely that there will be no cash flows. In that case, the asset owner is expected to perform a real estate owned to take over the asset. Such real estate owned typically takes nine months, possibly longer, by going through the necessary foreclosure process. Thus, Fitch IBCA assumes one year on average. During that time, the asset owner has the right to seize rents; however, all the other creditors of the borrower have the same right. It is impossible to determine in advance the exact number of possible creditors of such borrower and the extent of their rights. Thus, Fitch IBCA cannot give credit to any rent seizures during this first year.

■ Typical Structures

Structures may vary for such assets; thus, this report does not attempt to describe them. Rather, deal-specific reports will describe the specific structures employed and any relevant structural and legal risks.

Fitch IBCA's Information Requirements for Japanese Non-Performing Loan Securitisations

Borrower's Situation	Asset Status	Asset Resolution	Servicer
<ul style="list-style-type: none"> • Identity of each borrower (including type of operating entity and type of industry). • Background of each borrower and reasons for delinquency. • Present status of each borrower (i.e. not in bankruptcy, in reorganization, in liquidation, etc.). 	<ul style="list-style-type: none"> • Exact location. • Type of each property collateralizing loans • Details for each property <ul style="list-style-type: none"> — Size of land/building. — Specific zoning (youto chiiki) — Building area per land (kenpei ritsu; actual and limit). — Gross floor area per land (youseki ritsu; actual and limit). • Ownership position or other registration in "Kou-ku" of land registry. • Present situation of each property. • Cash flow statements for each performing property. • Lease agreement for each performing property (if applicable). • If applicable, explain how organized crime is involved (Yakuza). • Asset concentration summary. • For each large asset (especially if portfolio is not sufficiently diversified): <ul style="list-style-type: none"> — Market report. — Appraisal report. — Engineering report (including seismic report and calculation of PML in case large building). — Environmental report. • Comparable sales data (especially if it is an unusual property type or is outside Tokyo). 	<ul style="list-style-type: none"> • Resolution plan for each unresolved asset (including resolution method, expected resolution price, and timing). • Original loan balance. • Sale price of each non-performing loan (applicable upon loan purchases). • Historical data for resolved assets: <ul style="list-style-type: none"> — Original loan balance. — Underwriting price (applicable upon loan purchases). — Resolution method (discounted payoff, foreclosure, voluntary sale, or real estate owned, etc.). — Actual resolution price and timing. 	<ul style="list-style-type: none"> • Compliance with new servicer law. • Overall business plan. • Management structure. • Fiscal position (financial statements, annual report, etc.). • Shareholder structure. • Servicing fee system. • Composition or servicing team. • Information system. • Compliance controls systems. • Procedure manuals. • Number and details of assets under each asset manager. • Internal training system. • Resume of each asset manager. • Track record of each asset manager within this servicer.

Note: If any applicable information is not currently available, Fitch IBCA can make assumptions and provide feedback based on such assumptions.

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