

International Special Report

Criteria for Rating Japanese Equipment Lease Securitisations

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A Japanese translation of this report will be available shortly.

■ Summary

Equipment leases are one of the most important asset classes to be securitised in Japan to date. The first lease-backed securitisation in Japan was launched in February 1997 and there have been 22 public transactions, a US dollar equivalent of 6.044 billion, completed since then. The majority of all the major finance leasing companies in Japan have launched lease securitisations, including Japan Leasing, IBJ Leasing, Central Lease, Tokyo Leasing, and Ricoh Lease. The leases backing the securities have been written for various types of equipment, such as information technology equipment (including computers), industrial equipment, as well as commercial and service equipment. The types of leased equipment in the Japanese market are as diverse as they are in the US and include furniture, small personal computers, telecommunications equipment, medical machines, and aircraft.

The relatively high and increasing use of securitisation among leasing companies in Japan can be explained by the benefits they receive from securitisation. A leasing company's funding strategy is an important factor in its ability to compete successfully in its niche market. The cost, diversity, and dependability of a lessor's funding sources can directly affect its competitive position. To this end, securitisation provides several benefits to equipment lessors, most important of which is an alternative source of funding. Securitisation can help reduce a lessor's cost of funds, as the interest rates associated with the issued notes are typically lower than the borrowing costs of bank credit facilities. The beneficiary certificates (equivalently called beneficiary interest) common in Japanese lease-backed securitisations have a fixed rate and, as a result, would provide interest rate protection to the lessor (because, to date, all leases in Japan have a fixed rate). Finally, securitisations typically contain fewer covenants than most traditional bank credit facilities, such as cross-default, pari passu, and negative pledge provisions, thereby providing more flexibility.

Equipment leases are also an important asset class for securitisation outside Japan, particularly the US. In 1997, Fitch IBCA rated more than \$3.2 billion out of \$7.0 billion equipment lease-backed transactions, excluding aircraft transactions, more than 80% of which represented publicly issued securities. In 1998, the volume was almost double. Major issuers rated by Fitch IBCA in the US include Advanta Business Services Corp., AT&T Capital Corp., Copelco Capital Funding Corp., Heller Financial, Inc., Greentree Financial, Corp., and DVI Financial Services Group. The US market has developed substantially since its inception, and these transactions are now widely accepted by most major investors. This is evidenced by improved pricing, lower credit enhancement, and the inclusion of various structural features that were not previously available to these issuers.

Fitch IBCA performed an analysis of the Japanese equipment lease market in comparison to the US market. This report details Fitch IBCA's findings of the similarities and differences between the two markets. More importantly, this report outlines Fitch IBCA's general criteria for equipment lease securitisations in Japan.

US Lease Securitization Transactions

	Copelco Capital Funding 1997-A	Capita Equipment 1997-1	DVI Receivables V L.L.C.	Heller Equipment 1997-1
Closing Date	June 19, 1997	Dec. 3, 1997	Sept. 12, 1997	Oct. 30, 1997
Type of Company	Small Ticket	Small Ticket	Big-Ticket Medical	Mid-Ticket
Size of Transaction (\$)	568,700,000	1,200,000,000	195,300,000	274,800,000
Deal Size/Ratings (\$)	142,197,000/'F1+'/'AAA'	272,500,000/'F1+'/'AAA'	180,600,000/'AAA'	62,980,096/'F1+'/'AAA'
	54,182,000/'AAA'	252,000,000/'AAA'	N.A.	191,678,552/'AAA'
	211,495,000/'AAA'	153,000,000/'AAA'	N.A.	N.A.
	126,667,000/'AAA'	261,210,000/'AAA'	N.A.	N.A.
	N.A.	105,000,000/'AAA'	N.A.	N.A.
	22,746,000/'A+'	68,820,000/'A+'	10,500,000/'A'	8,214,795/'A+'
	11,314,085/'BBB+'	34,410,000/'BBB+'	4,200,000/'BBB'	5,476,530/'BBB'

Credit Enhancement (%)

'AAA'	15.00	16.25	15.00	8.00
'A'	11.00	10.25	10.00	5.00
'BBB'	9.00	7.25	8.00	3.00

Portfolio Characteristics

Number of Contracts	36,181	75,651	353	1,841
Average Discretionary Lease Balance (\$)	15,634	15,161	399,365	149,270
Portfolio Seasoning (Mos.)	8.0	7.0	N.A.	22.0
Top Five Obligor (%)	N.A.	N.A.	11.39	8.00
Base Case Net Loss (%)	2.12	3.39	< 1.00	< 1.00
Equipment Concentration (%)	Copiers (51.30)	Telecommunications (46.80)	Medical Resonance (25.45)	Printing (27.10)
	Other (13.40)	Manufacturing (19.00)	Medical Equipment (16.65)	Machine Tools (12.50)
	Electronics (10.90)	Computers (15.60)	Facilities (14.33)	Computer Hardware (9.90)

Geographic Concentration (%)

State 1	California (18.80)	California (14.70)	New York (19.83)	California (17.70)
State 2	New York (13.20)	New York (10.50)	California (15.86)	New York (7.80)

N.A. – Not applicable.

Fitch IBCA's rating approach to lease securitisations includes the analysis of management and the company, characteristics of the underlying assets, types of receivables, pool characteristics, historical portfolio performance, credit underwriting and servicing, projected cash flow, and legal structure. Because there have not been any securitisations for operating leases in Japan and Fitch IBCA does not expect any in the near future, Fitch IBCA's residual value analysis is highlighted in the Appendix on page 10 and explains how Fitch IBCA gives credit to residual values, in the form of additional credit enhancement, or as additional monetized cash flow, on a case-by-case basis.

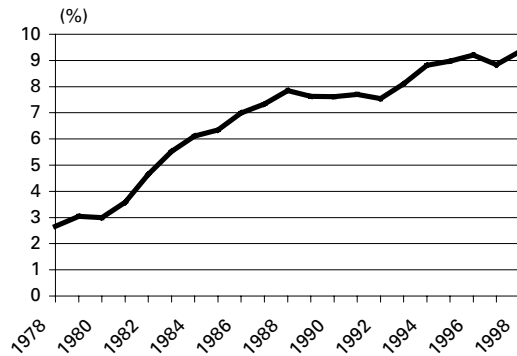
■ Leasing Industry in Japan

The first leasing company in Japan was established in 1963. The volume of equipment lease contracts for fiscal 1969 was ¥120 billion, and it took six years to exceed ¥100 billion. The equipment lease contract volume for fiscal 1979 was ¥1.461 trillion, more than 10 times that of fiscal 1969. It was estimated to be ¥7.144 trillion in 1998.

The Japan Leasing Association was established in 1971, and its current membership includes 363 leasing companies. It was established to promote equipment leasing as a new financing method in Japan. Currently the association conducts industrywide research on subjects ranging from lease accounting to tax treatment for leases.

According to the Japan Leasing Association, the market penetration rate of equipment leasing (leasing as a percentage of private capital investment) was 8.84% (actual) in fiscal 1997 and 9.34% (estimated) in fiscal 1998, in marked contrast to just 2.67% in fiscal 1978. The chart on top of page 3 shows the consistent long-term rising trend of the market penetration rate for equipment leasing demonstrating the increasingly important role of equipment leases in private capital equipment investment. Additionally more than 90% of all businesses in Japan lease, rather than purchase, equipment. One of the reasons for this is that leasing offers Japanese business owners (the lessees) several advantages, including the ability to: match-lease terms with equipment needs; minimize monthly payments; manage cash flow; and avoid technological obsolescence risk (depending on the lease

Market Penetration Rate of Equipment Leasing in Japan (1978–1998)



Source: Japan Leasing Association.

structure). In Japan, the most commonly leased equipment type is information systems, such as computers or systems for telecommunications. For fiscal 1997, 42.4% of leasing contract volume was for information systems equipment. Although almost all leasing companies in Japan are affiliates or subsidiaries of banks, trading companies, or manufacturing companies, some of these companies are listed on the Tokyo Stock Exchange. The table below lists these finance leasing companies.

There are two types of leases: finance and operating. In most cases leases in Japan are structured as finance leases, with the exception of operating leases applied to a few types of equipment, such as certain construction machines, among others. The primary reason for this is that the secondary (second-hand or used equipment) market in Japan is not as mature as the US market, where operating leases are more common, particularly for larger ticket items.

In Japan, a finance lease is structured so that the lease payments cover the original equipment cost without considering sale or re-lease of the equipment. The residual value of the equipment is not used to calculate the lease rent, except in the cases of finance leases for printing machines, construction machines, or certain factory machines, because such equipment is typically durable and involves reduced obsolescence risk. The lease term for finance leases in Japan is usually determined based on the legal life of the equipment, which is the term for depreciation regulated by the National Tax Authority in Japan. The lease term must be 70%–120% (see No. 1 below) of the legal life, which is less than 10 years for tax reasons. For example, in the case of a computer, which has a six-year legal life, the minimum lease term for that equipment is four years (see No. 2 below) and the maximum one is eight years (see No. 3 below).

1. If the legal life of the leased equipment is equal to or more than 10 years, the lease term must be 60%–120% of the legal life.
2. Six times 70% equals 4.2, and then round down to four years.
3. Six times 120% equals 7.2, and then round up to eight years.

■ Lease Receivables

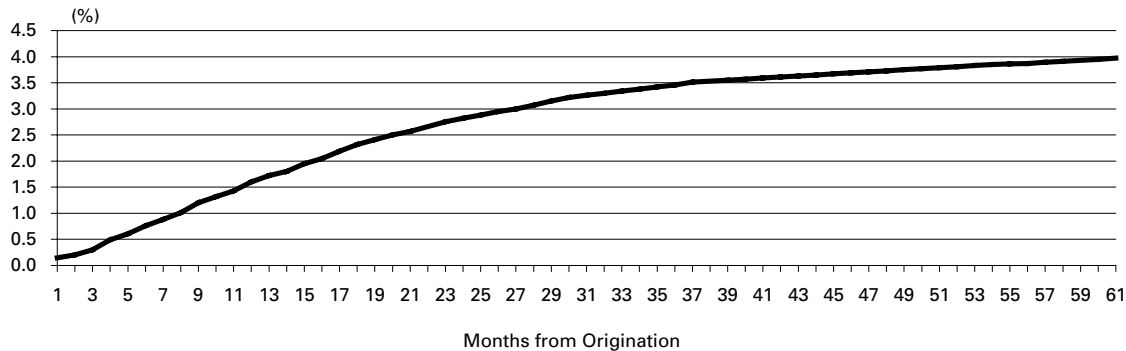
Fitch IBCA has classified leasing portfolios into three general types based on its experience in the US and other market: small ticket; mid ticket; and large ticket. Small ticket leasing portfolios typically consist of leases on equipment with a cost basis of less than ¥6 million (US\$50,000) including office equipment, computers, and copiers. Because of the reduced cost of the equipment, a small-ticket leasing company generally leases to many different obligors in various industries. This obligor and industry diversity allows Fitch IBCA to rely on the originator's credit underwriting policies and historical portfolio performance to estimate future performance. Mid-ticket lease portfolios typically contain equipment with

Listed Finance Leasing Companies in Japan

	ORIX	Diamond Lease	Central Lease	Tokyo Lease	Sumisho Lease	Ricoh Lease	Sanyo Electric Credit
Established In	4/64	4/71	5/69	8/64	2/63	12/76	4/69
Listed In	4/70	3/85	11/89	2/90	11/83	1/96	7/96
Group (% of Shares)	Independent	The Bank of Tokyo-Mitsubishi (5.0%)	The Tokai Bank (5.0%)	The Daiichi Kangyo Bank (4.5%)	Sumitomo Corp. (37.1%)	Ricoh (51.4%)	Sanyo Electric (59.0%)
Total Revenue (¥Mil.)	748,177	317,110	244,252	348,713	297,978	185,456	26,972
Operating Income (¥Mil.)	8,638	5,772	1,586	3,541	5,099	6,561	7,912
Total Assets (¥Bil.)	3,621	1,022	722	931	757	598	384
Equity Ratio (%)	3.7	2.0	2.5	2.6	2.0	4.0	6.7

Note: Figures are as of March 31, 1999. Excludes operating lease companies.

Typical US Small-Ticket Portfolios — Cumulative Loss Curve



an original cost of ¥6 million–¥30 million (US \$50,000–US\$250,000), such as commercial and industrial equipment, graphics, and printing equipment. Large-ticket equipment pools include MRIs and other medical equipment with an original cost exceeding ¥30 million (US\$250,000) or large computer systems. If the pool contains any concentration by lessee, industry, equipment, lease balance, vendor, or geographic location of lessee, Fitch IBCA increases the required enhancement to reflect the additional risk. Base case portfolio loss assumptions, which are losses expected under normal conditions, are then stressed to reflect the appropriate rating category for the transaction.

In cases of both finance and operating leases (the latter is much less common in Japan), the lessor purchases the equipment and leases it to a lessee under a lease contract, which obligates the lessee to a set of scheduled payments for a specific period. Payment streams can be structured on a monthly, quarterly, semiannual, or seasonal basis, reflecting the lessee’s business needs and cash flow cycles. Payments for finance leases in Japan are typically structured as a fixed amount over the lease term for tax reasons.

In the US and Japan, finance leases (or full payout leases) are structured so that the net present value of the lease payments covers at least 90% of the original equipment cost for new equipment or the fair market value for used equipment.

In contrast, payments on operating leases cover only a portion of the equipment cost (less than 90%). The remaining value of the equipment is referred to as the residual. At the end of the lease term, the residual value can be realized by the lessee purchasing the equipment at the originally stated value or, in the event the equipment is returned to the lessor, the sale of the equipment. Other options include the lessor extending the lease for a short period at the original

lease rate to the original lessee or re-leasing the equipment to the same or different lessee at a renegotiated lease rate. Each option allows the lessor to recoup at least a portion of the residual value.

A lessee typically does not have the option to prepay a lease. However, many lessors in Japan allow early termination of a lease to upgrade equipment. The required prepayment amount normally includes the net present value of all payments remaining due on the lease from the time of prepayment until the conclusion of the lease term, including any residual value.

Fitch IBCA does not treat prepayment simply as default. Fitch IBCA understands that prepayment can be related to either the destruction of the equipment or an upgrade of the equipment.

In the case of prepayment caused by equipment upgrade, in many transactions, the originator is obligated to repurchase the lease receivables after the prepayment by the lessee occurs. Because of the nature of an equipment upgrade, it is common for the lessee not to pay the prepayment amount to the originator. In such a case, the amount is just added to the new equipment cost. Repurchase fully depends on the credit quality of the originator because the originator repurchases the lease receivables without receiving the prepayment amount from the lessee. If the originator is not highly rated and is obligated to repurchase the lease receivables after the prepayment occurs, Fitch IBCA determines the impact of the credit quality of the originator by considering the following factors:

1. **Diversification per type of leased equipment.** The equipment upgrade is a function of technology innovation. The greater the portion of the equipment that goes under technology innovation is involved in the securitized pool, the higher the likelihood for the lessee to upgrade

the equipment is. If the securitized pool consists of, for example, only furniture, equipment upgrade is not expected to occur.

2. **Prepayment ratio for specific time window.** Although prepayment can happen at any time, the originator usually pays the trustee the amount necessary to repurchase the lease receivables in accordance with the timing of payment date that is specific to the securitization: monthly; quarterly; or semiannually. Fitch IBCA estimates the prepayment ratio for that time window based on the historical prepayment ratio. The longer the time window is, the higher the prepayment ratio. The higher the prepayment ratio, the more the investors are exposed to the credit quality of the originator.

Generally, for leases to be included in a securitisation, the following eligibility criteria must be satisfied:

- At least one month of seasoning (the greater the seasoning, the higher the likelihood that the leases will perform).
- No receivable more than 30–60 days past due at closing.
- No lessee is bankrupt as of cutoff date.
- Leases must be “hell or high water,” meaning that in spite of default of the supplier or the lessee, or in spite of obsolescence or destruction of the leased equipment, the lessee is obligated to pay lease rents.
- Leases must be “triple net.” Triple net leases refer to leases where the lessee is responsible for the maintenance, relevant tax, and insurance for the leased equipment.
- Leases must be assignable so that they may be assigned to the securitisation trust.

■ Analysis

In lease securitisations, the value of each contract sold to the trust is the sum of the net present value of the remaining lease payments due on the contracts. If any monetization of residuals is involved, the aggregate value of booked residuals, as of the end of the lease term, would also be included. Notwithstanding any concentrations, credit enhancement for a lease securitisation must be adequate to cover any defaults and losses on the leases during the life of the deal, plus any loss on equipment at the end of the lease term.

For operating and finance leases, several factors influence the level of defaults that occur during the lease term. Fitch IBCA believes that the primary default driver is the credit quality of the lessee. Lessee defaults are best mitigated by conservative underwriting standards that encompass a review of each borrower’s willingness and ability to pay, as well as the borrower’s overall operation. The equipment should be integral to

Minimum Credit Enhancement on Lessee Concentration

Rating Category	Sufficient to Cover Default Of
'AAA'	Five and Six Largest Lessees
'AA'	Four to Five Largest Lessees
'A'	Three to Four Largest Lessees
'BBB'	Two to Three Largest Lessees

the core functions of the lessee’s business and active maintenance programs should be in place.

Seasoning also plays a role in mitigating defaults. A lessor’s seasoned portfolio will experience fewer defaults relative to its unseasoned portfolio because the lower quality credits are already removed from the pool due to their early default. Consequently, the more seasoned the leases are, the better the quality. Fitch IBCA looks more favorably on seasoned payment streams when determining credit enhancement levels. In addition, if the lessor, by providing static pool information, can prove the timing of defaults and recoveries through historical loss curves, Fitch IBCA can give credit to seasoning.

Recoveries on repossessed equipment primarily reflect the equipment’s liquidity, the historical volatility of the used equipment market, and the lessor’s access to that marketplace. To the extent that the market for a particular type of equipment is liquid and relatively stable and the lessor has good access, recoveries will be higher and more predictable (for example, the markets in Japan for used automobile and construction machines are fairly liquid). In addition, vendor or manufacturer remarketing support is viewed favorably.

To assess concentration risk, Fitch IBCA examines the pool by lessee, industry, geographic location by prefecture, equipment type, and vendor/manufacture concentrations. To the extent that the pool has any significant concentrations, Fitch IBCA evaluates the rating and financial condition of those lessees, as well as the market conditions to which they are subject. At a minimum, credit enhancement must be sufficient to cover default of approximately the top five or six largest lessees for an ‘AAA’ rating, approximately the top four or five largest lessees for an ‘AA’, approximately the top three or four largest for an ‘A’, and approximately the top two or three largest for a ‘BBB’. This approach is used less frequently as diversification within transactions improves. If the pool is concentrated in a single industry or geographic area, Fitch IBCA reviews the historical volatility of that industry and economic region. If most leases relate to a specific type of equipment or manufacturer, Fitch IBCA reviews the equipment performance and long-term viability of the

manufacturer. To the extent that there are any significant vendor/manufacturer concentrations where the lessor depends on the vendor for remarketing assistance or if the vendor is providing any loss recourse, Fitch IBCA will conduct a full analysis of the vendor's credit quality and the details of the vendor agreement.

Fitch IBCA also evaluates the structure of the leases included in the pool.

To establish expected base case cumulative net loss levels for the securitisation, Fitch IBCA reviews:

- Contractual delinquencies.
- Defaults and recoveries or net losses on a static pool basis (minimum three to five years of history).
- Residual realization (minimum three to five years of performance).
- Lessee concentrations.
- Vendor/manufacturer concentrations.
- Geographic distribution.
- Diversification of equipment types.
- Industry distribution.
- Portfolio seasoning.
- Lease balance.

■ Cash Flow Stress Tests

Once a base case cumulative static net loss number is determined, the following multiples are applied to stress losses for the various rating categories: 4.5 times (x) to 6.0x for an 'AAA' rating; 4.0x–5.0x for 'AA'; 3.0x–4.0x for 'A'; 2.0x–3.0x for 'BBB'; and 1.5x–2.0x for 'BB'. In the US for small-ticket lessors, static net losses typically range from 2.5%–4.5%; for mid- to large-ticket essential-use equipment lessors, it is not uncommon to see static net losses under 1%. In Japan during the last five years, the average dynamic default ratio seems to be less than 0.5%, based on information disclosed for past securitisations. Fitch IBCA believes that one of the reasons that losses in Japan are lower than those in the US is the historically strong debt repayment behavior of Japanese consumers and businesses.

Fitch IBCA will review transaction cash flows to evaluate the adequacy of the financial structure, incorporating: the payment structure of the leases; delinquency, default, and recovery expectations during the lease term; prepayment assumptions; and residual value realization and timing.

■ Financial Structure and Credit Enhancement

Lease securitisations traditionally have been financially structured as term deals. With a term structure, the deal's maturity is a function of the

longest lease included in the transaction plus a remarketing period for some large-ticket items.

Lease securitisations commonly contain performance triggers that, when hit, would typically capture any release of cash and may turbo pay the bonds sequentially. These triggers usually take the form of delinquency and default or loss tests.

Credit enhancement is determined by applying the two approaches previously mentioned — the concentration approach and the cash flow loss multiple method. The approach that requires the highest level of support typically will drive the credit enhancement. Internally provided credit enhancement on lease-backed transactions has historically included reserve funds or cash collateral accounts, overcollateralization, subordinate bonds, and trigger events. External credit enhancement includes surety bonds and bank letters of credit. Lessors with proven long-term residual realization track records may use some portion of booked residuals as part of the required credit enhancement.

In the early 1990s in the US, it was not uncommon to see transactions with 25%–30% credit enhancement for 'AAA' ratings. Recent deals in the US have had 'AAA' credit enhancement requirements that range from as low as 8%–15%. This reflects a combination of lessors being able to produce better quality historical data and more diversified pools, as well as Fitch IBCA becoming more comfortable with the predictability of future losses. Credit enhancement levels in Japan for 'AAA' rated deals have ranged between approximately 15%–30%. Public transactions in the US tend to have lower credit enhancement than those in Japan because these companies have more readily available historical performance data — specifically, reliable static data — due to better lease management systems, despite the higher default ratio.

■ Management/Company Review

Fitch IBCA performs a complete analysis of each issuer, focusing on the company's formation, growth, goals and objectives, marketing strategy, competitive position, financial health, depth and experience of management, and funding capabilities. All these factors affect the quality of the receivable underwritten. For each transaction, Fitch IBCA tries to assess the financial strength and viability of the potential issuer if a formal rating does not exist. Fitch IBCA's Japanese Structured Finance analysts work closely with the Financial Institutions analysts in Tokyo and the US and benefit from the significant expertise of the latter in the analysis of leasing companies. Management is reviewed for depth and

level of experience. Fitch IBCA tries to understand the company's history, organizational structure, strategies, and goals. The financial strength of the lessor, if it is acting as the primary servicer, is critical, since Fitch IBCA wants to be assured that the servicer will be operational during the life of the deal.

■ Originator Review

Credit Underwriting

The quality of the underwriting process is critical to the performance of the receivables. Fitch IBCA believes lessors should demonstrate that formal credit policies and procedures are in place and are being followed, as this is essential to minimizing losses. Exceptions to credit policy are a concern, since they are usually an indication of possible portfolio deterioration. The tenure and experience of the credit analysts are reviewed, as is the structure of the credit department. Underwriters should have strong lease finance backgrounds, and a training process should be available to new hires. Lending authority should be designated by underwriter experience.

If leases are purchased through a vendor/dealer network such as NEC or Fujitsu in Japan, Fitch IBCA reviews the lessor's vendor/dealer approval and monitoring process. Vendors/dealers should be subject to initial background checks encompassing a review of their financial condition, bank and trade credit references, length of time in business, and the quality of their customer service programs, particularly as they relate to equipment maintenance. Delinquencies and chargeoffs should be reviewed for each vendor on an ongoing basis, with established procedures to eliminate vendors, if warranted.

Each lease applicant should be subject to a full credit review, including an examination of bank and credit bureau reports, such as Teikoku Databank or Tokyo Shoko Research, past payment history for repeat customers, and financial statements, if applicable. All data provided by vendors for vendor-initiated loans should be verified. In addition, lease terms should be reviewed to ensure compliance with the underwriting guidelines. It is common in Japan for lessors to use a credit-scoring system. In that case Fitch IBCA reviews the methodology incorporated in the system, including all inputs and assumptions. Approval/reject ratios, rejection reasons, and range of scores are reviewed.

Quality control is also a critical factor in Fitch IBCA's review of lease originators. The lessor should review the portfolio periodically. Any exceptions to the underwriting criteria should be fully explained. The lessor should be able to make adjustments to its underwriting policies and procedures based on reviews of performing and

nonperforming portfolios. In addition, an internal audit process should be in place to ensure compliance with all company and industry guidelines.

Fraud

For each issuer, Fitch IBCA pays close attention to the company's policies and procedures to see that the risk of fraud from lessees, vendors, or the lessor itself is minimized. A company can take steps to try reducing the risk of fraud but can never fully eliminate it. Isolated instances of fraud are usually undetectable; however, repetitive fraud can be avoided. Fitch IBCA does not police issuers, but makes sure that they are monitoring themselves.

Lessors should be completing background checks on management for every deal and should be receiving recent audits and management letters. For transactions involving mid- and large-ticket equipment, the lessor should complete an on-site due diligence prior to funding the lease. Fitch IBCA usually requires one month of seasoning on all lease receivables, as fraud typically occurs early. Fitch IBCA prefers the seller's continuous involvement (servicing). Tight eligibility criteria, such as prohibiting lessees that have ever been in bankruptcy, are essential. Fitch IBCA reviews employee compensation to see whether it is based on volume or end-of-lease profits.

Each lessor should have an internal audit system. If a credit scoring system is used, Fitch IBCA prefers one that has been audited. Fitch IBCA will conduct a sampling of lease credit and documentation files to ensure that credit policies are being followed. In some markets, such as the U.S., issuers apply a stamp or mark on the actual lease documents that have been securitised to avoid double financing and also file such leases in file cabinets segregated from those leases that have not yet been securitised. With respect to the risk of double financing in Japanese lease securitisations, Fitch IBCA will consider an independent auditor's opinion. An experienced certified public accountant in Japan should perform a system audit of the originator to verify that the system does not evidence any double assignments of lease receivables to the securitisation. Fitch IBCA will discuss with the individual sellers what procedures they have in place to protect against fraud or error with respect to equipment leases. Finally, Fitch IBCA will require certain representations and warranties to be made in a transaction's documentation to protect against potential fraud, which, if breached, must be cured. If the originator is not a highly rated entity, Fitch IBCA may require extra credit enhancement to protect against double financing.

Servicer Review

The ability to properly service receivables in a timely manner directly affects the quality and performance of a

transaction. As part of a due diligence review of the servicer, Fitch IBCA examines the servicer's billing and collections process. Collectors' experience and organizational skills are reviewed to ensure that the more experienced collectors are handling problem accounts. Borrowers should be contacted and counseled early in the delinquency period, with more experienced collectors calling higher balance accounts and longer-term delinquencies. All collectors should have experience handling leasing customers, and a training program should be in place to add new collectors. The servicer's systems should track billings, receipts, nonpayments, insurance, and all borrower contact. The systems must also generate informative management reports regarding portfolio performance, as well as trustee/certificateholder reports. If a lease is deemed uncollectible, repossession should be initiated, if economically beneficial, and an asset disposition plan should be implemented for each equipment type where repossession is enacted to ensure that recoveries are as high as possible.

Fitch IBCA will require a backup servicer in cases where the originator is not highly rated, or has limited experience. In cases where the existing servicer has a sufficiently high rating, Fitch IBCA may not require a backup servicer up front but would require the trustee to appoint one if certain circumstances arise and assuming there are a sufficient number of backup servicers available to replace the original. In this situation, Fitch IBCA would ensure that the servicing fee was high enough to attract replacement servicers. In Japan, there is a shortage of qualified backup servicers. In addition, there are limitations on which entities are permitted to service certain loans, which makes it difficult for experienced third-party servicers to participate in the market. Fitch IBCA will consider all these factors when evaluating a servicer and whether or not a backup servicer is required. Credit enhancement may be increased to protect investors from commingling risk as a result of a servicer bankruptcy. In the US, lease payments are applied to segregated trustee lock box accounts to deal with commingling risk; in Japan, there is no such practice.

Fitch IBCA will require liquidity cash reserves to cover the interests for the transition period from the original servicer to a backup one if the original servicer goes bankrupt. Fitch IBCA determines the length of the transition period on a case-by-case basis by considering the following factors:

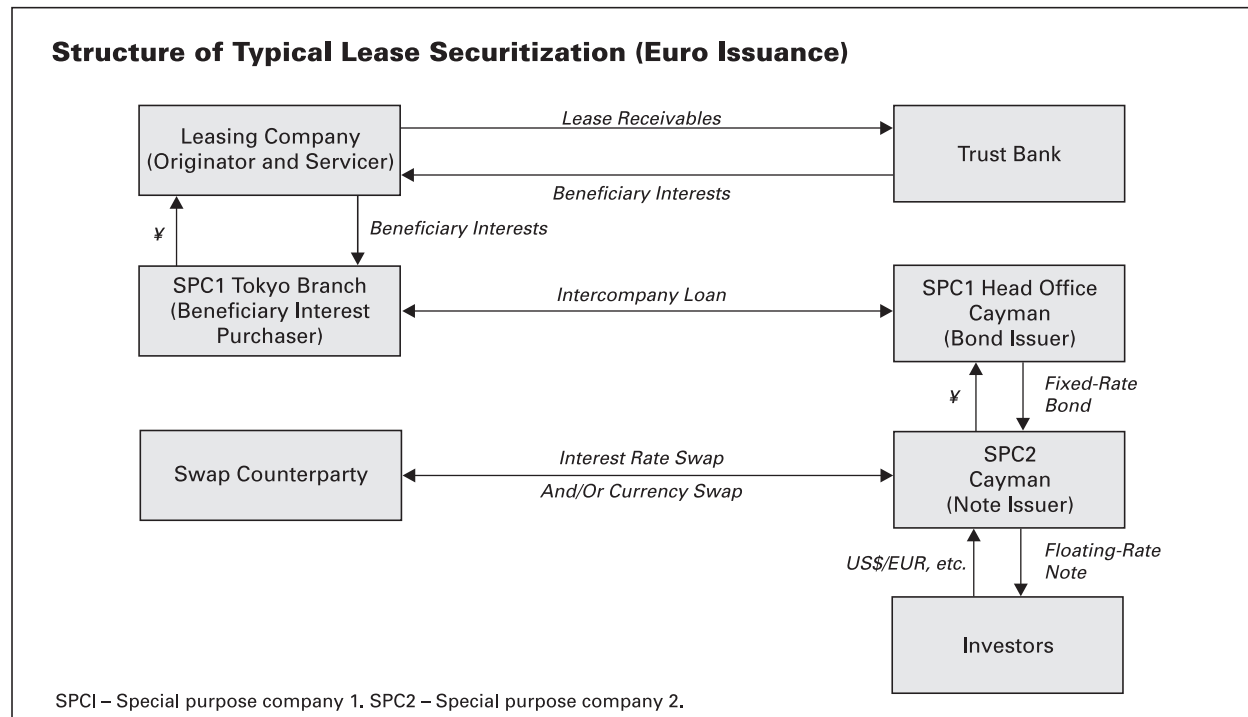
1. Is a hot or warm backup servicer appointed at the closing date? Are there any triggers to appoint the hot or warm backup servicer when they are not appointed at the closing date?
2. How long does it take for the backup servicer to send a notice in writing to the obligors to have them understand the whole situation and ask them to pay lease rent to the backup servicer?
3. It happens quite often that another leasing company acts as a backup servicer for the securitization. Can it make space and manpower available immediately after the originator goes bankrupt? There are a lot of things that must be done in a short period. These include notification to the obligor, which will call the backup servicer for questioning. A verbal explanation along with a notice is preferable.
4. Direct automatic account transfer is a popular payment method in Japan. How long does it take for the original servicer to stop the payment instructions to financial institutions that may be in the form of magnetic tape or on-line data transfer? Because cooperation of the original servicer (the originator) is crucial, the originator should be obligated to stop the payment instructions as soon as possible when they are dismissed as a servicer.

In the case of Japan Leasing Corp. (JLC) bankruptcy, the trustees for securitizations dismissed JLC as a servicer immediately after JLC filed the petition for the Company Reorganization Law on 27 Sept. 1998. The trustees sent a notice in writing to the obligors within a week after the filing. In their notice, they specified the lease receivables assigned from JLC, explained that those lease receivables were perfected against the obligors under the MITI law, and asked them to pay lease rent directly to the trustee or SPV. The obligors seemed to be confused because the bankruptcy trustee of JLC also sent a notice in writing to them asking generally to keep paying to JLC without stating that lease rent securitized should be paid directly to the related trustee or SPV, not to JLC. Each trustee for securitizations and the bankruptcy trustee of JLC reached the accord respectively in the middle of October 1998 that appointed JLC as a servicer again with the permission by the court.

Legal Issues

When rating an equipment lease-backed transaction, Fitch IBCA evaluates the legal structure's strength. Key areas of focus include the perfection of the assignment of receivables, the bankruptcy-remoteness of the structure, and tax-related issues.

Perfection of Transfer of Receivables: The law regarding regulation of business concerning specified claims, etc. (also called the specified claims law, the MITI law, or the Tokusai-ho) was enacted in 1993, and opened the market to securitisation in Japan. For example the first securitisation was launched in November 1994 and was backed by auto loans.



The MITI law enables Japanese leasing and finance companies to securitise loans, leases, and receivables by pooling them together. Assets covered under the MITI law include equipment leases, auto loans, and credit cards. The law also provides a method for perfecting assignments against obligors, lessees, and third parties by means of a single public notice. This notice should appear in a daily newspaper, distributed nationwide, before the closing date of the securitisation. There is no need for further announcements during the life of the securitisation.

True Sale Consideration: To ensure a true sale of the assets from the seller to the trust, the related guidelines in Japan provide that the seller must be deemed to have surrendered control over such assets only if: the trust's right and interest in the transferred assets have been secured against the seller and its creditors and has been duly segregated from the seller's bankruptcy risk; and the trust may enjoy the rights and interest to and in the transferred assets.

The transaction's structure must ensure that a seller insolvency will not interrupt timely payments of interest and the ultimate payment of principal. Under Japanese law, the originator/seller entrusts to the trustee ownership of the existing and any additional receivables to be securitised. The receivables become assets of the trust such that legal title to the receivables would not constitute part of the originator/seller's

estate in any bankruptcy, insolvency, or reorganization proceeding of the seller.

Fitch IBCA will require a true sale opinion or the equivalent when appropriate. This opinion would confirm that the sale of the assets from the originator to the trust is considered a true sale such that if the originator were to become insolvent, the assets would not be considered part of the bankruptcy estate.

Taxes: Fitch IBCA will require a tax opinion that addresses any taxes, such as a withholding tax or corporate tax, that may affect cash flows to investors. If such taxes exist, credit enhancement may be required to compensate the trust and investors and/or any risk will be disclosed to investors.

■ Legal Structure

Although a variety of legal structures can and have been utilized, an example of a structure typically used in Japan for issuance in European markets is as follows (see chart above):

- The leasing company entrusts its lease receivables to the trust bank.
- The trust bank issues beneficial interests in exchange for the receivables.
- The leasing company retains the subordinated beneficial interest.
- The leasing company sells the senior beneficial interest to the Tokyo branch of special purpose

company 1 (SPC1), which usually is incorporated under Cayman laws and whose nonvoting preference share is owned by the leasing company.

- SPC1 issues bonds backed by the senior beneficial interest on a private placement basis, and special purpose company 2 (SPC2), incorporated under Cayman laws, subscribes to these bonds.
- SPC2 then issues the notes, which are placed in European markets. Repayment of the notes is backed by the bonds.

■ Appendix

Fitch IBCA introduces residual value analysis and structural features of US lease-backed securitisations. What follows is a description of structures and concepts used in the US market to date. As the market evolves, and as the Japanese market matures, these concepts and structures, as well as Fitch IBCA's criteria, will be modified to fit the new characteristics of the US market or the mature Japanese market.

■ Residual Values

For lease pools in which the lessor has substantial residual realization history, Fitch IBCA may give credit for residuals sold to the trust on a case-by-case basis as a form a credit enhancement or an additional cash flow to be monetized at the onset of the deal. Fitch IBCA reviews the lessor's residual realization history by type of equipment (for a minimum of three years but usually five to 10 years) and by method of disposition on a booked versus actual basis. Fitch IBCA also reviews the company's method for determining booked residual values. If it appears that the company is aggressively booking residuals, Fitch IBCA will assume lower recoveries.

Residuals can be realized in one of four ways: the exercise of purchase options by the original lessee; month-to-month lease extensions; re-leasing; and remarketing and sale of equipment in the secondary market.

For small-ticket leasing companies, 80%–90% of residuals are realized from the original lessee either exercising a purchase option or by a month-to-month lease extension. Most lease documents contain clauses stating that a lease will be extended automatically for four months to one year at the original lease rate if the lessee fails to notify the lessor 90 days prior to the lease termination date whether it wishes to buy the equipment or renew the lease.

Booked residuals are usually realized by the fourth month on an extension. When the equipment is returned, Fitch IBCA analyzes the process for remarketing the equipment. Some lessors have in-house refurbishment

Residual Advance Rates in US

Rating Category	(%)
'AAA'	40–70
'AA'	60–75
'A'	70–80
'BBB'	80–90
'BB'	90–100

units, while others outsource this function or sell the equipment “as is.” Fitch IBCA is particularly concerned about leases secured by equipment that is subject to technological obsolescence, low quality, and not supported by its manufacturer or vendor. Fitch IBCA supports the use of equipment upgrade programs that mitigate forfeitures at the end of the lease term. The time it takes to realize the residual is an important factor if the issuer is monetizing any portion of the residuals in the structure of the transaction.

Equipment recoveries primarily reflect the originator's refurbishment and remarketing programs. If the lessor has good access to the used equipment marketplace, and the ability to refurbish the equipment, recoveries will be higher. Fitch IBCA also considers the historical price volatility of various equipment markets to the extent applicable. If the used market for a particular equipment type has been very stable, Fitch IBCA gives more credit for residual values; volatile markets require more caution. Some lessors have asset management groups dedicated to the realization of residual values, even to the extent that compensation is based on gains over booked residuals. Knowing that the company is dedicated to recouping that cash flow provides an additional level of comfort.

If a lessor can demonstrate that it has consistently generated a strong gain over booked residuals in a timely manner, this additional cash flow can be factored into the rating analysis to support the transaction.

Fitch IBCA's stress factors that are applied to booked residuals differ by rating category, as indicated in the table at right.

For example, if the historical residual realization average for an issuer is 140%, Fitch IBCA would apply a 60% advance against 100% of the booked residuals. Based on the 140% historical average, the stress correlates to a 43% advance against the actual historical average, which is quite conservative.

For transactions where residuals are used as a form of credit enhancement, there are usually triggers called residual events that would capture the residual cash flow into the deal. Typically, when a deal is performing as expected, the residual cash flow is

available in that payment period, if needed to offset any shortfalls, but if the cash flow is not used, it is released to the seller. Residual events are usually a combination of triggers (delinquency, default, or residual realization) that, when hit, would stop the release of that cash flow and trap it into a trust account.

■ Structural Features

Revolving Structure

In the US, as lease transactions have proven themselves to investors and rating agencies in terms of performance, additional structures and provisions are now available to equipment lease securitisations that were not previously offered on such deals. Many lease transactions now incorporate nine- to 12-month revolving periods. A revolving structure extends the term of the transaction, depending on the length of the revolving period. During this period, all principal collections on lease receivables are used to purchase newly originated lease receivables. Once the revolving period ends, the transaction begins to amortize and all collections on the leases are used to pay down bondholders. However, if a seller bankruptcy, a material breach of representations and warranties, a servicer default, or a significant deterioration in portfolio performance occurs, the deal will begin to amortize early.

Prefunding Account

Alternatively, some transactions contain prefunding accounts. At closing, the issuer deposits a portion of the proceeds it receives into a prefunding account and the

funds are subsequently used to purchase additional receivables from the seller for a certain period (usually 90–120 days for lease transactions). At the end of this period, to the extent that any funds remain in the prefunding account, such funds are used to amortize the securities, which could lead to a prepayment. Prefunding periods allow issuers to lock in rates and increase the transaction size. An issuer must demonstrate its ability to generate sufficient volume to support this feature without jeopardizing credit policies. To eliminate the potential negative carry on the cash held, given that the bond coupon is higher than the interest rate earned on the funds in the prefunding account, some type of capitalized interest account is established at closing, which decreases as the amount in the prefunding account declines. The initial deposit for the capitalized interest account was established under the assumption of no additional lease purchases during the prefunding account.

Substitution Repurchase

Most transactions contain provisions allowing some type of optional lease substitution and/or repurchase of leases due to breach of representations and warranties, prepayments, or defaults. There may be limitations on this, depending on the jurisdiction due to accounting or legal issues. For example, in the US, substitution is limited to 10% of the initial deal size and structured and documented as options of the seller, as opposed to obligations. This is due to the regulators' view of recourse to the seller, which, in the US, could be a threat to the true sale of the receivables.

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