Securitization:
A Renaissance for Equipment Finance?

EQUIPMENT LEASING & FINANCE
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The Foundation is the only research organization dedicated solely to the equipment finance industry.

The Foundation accomplishes its mission through development of future-focused studies and reports identifying critical issues that could impact the industry.

The Foundation research is independent, predictive and peer-reviewed by industry experts. The Foundation is funded solely through contributions. Contributions to the Foundation are tax deductible.

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Purpose of the Study

Securitization of equipment lease and loan contracts and receivables ("Equipment ABS") has been an element of equipment finance since 1985. In 2011, the Foundation published a study on how investors should view Equipment ABS in the post-recession economy. That study concluded that Equipment ABS had performed better than almost all asset classes as well as stock, corporate bonds and real estate and had emerged from the Great Recession with renewed respect in the financial world.

The purpose of this study is to determine what has changed since the 2011 Study; what considerations are uppermost in investors' and rating agencies' evaluation of the various categories of Equipment ABS; what are the primary factors that have caused Equipment ABS to thrive as an asset class; and what is anticipated for the future of Equipment ABS. This 2015 Securitization Study will analyze all of those areas and assess the future of Equipment ABS by using the SWOT framework (Strengths; Weaknesses; Opportunities; Threats). Readers both experienced with securitization and those contemplating a first time Equipment ABS transaction will benefit from this Study.

Executive Summary

Securitization is a technique for bundling large amounts of equipment lease and equipment loan contracts, transferring them to a special purpose, bankruptcy remote entity, and having that entity issue securities (typically, debt securities) which are highly rated (except for more deeply subordinated classes). The securities are typically sold to institutional investors, and bear an interest rate significantly lower (in most cases) than would debt securities issued by the equipment lender or lessor itself.

Since the first Equipment ABS were issued in April, 1985, issuance in the United States has grown, mirroring the domestic economic conditions. The business cycle, competing forms of equipment finance, and a more positive attitude of the federal government to Equipment ABS (such as 40 Act Rule 3a-7 and the IRS "Check the box" regulation for electing tax treatment of the ABS issuer), and possibly industry consolidation have contributed to the ratchet-like growth in the sector.

The entrepreneurial spirit of equipment finance has been mirrored in the evolution of Equipment ABS. Issuances include not only the small- and mid-ticket business equipment contracts which were securitized in the 1980s, but also asset classes such as equipment for the transport and alternative energy sectors. Similarly, the creativity which has characterized equipment finance has led to innovative structures such as those which combine securitized leveraged lease debt with tax equity investment; those which use securitization as an aspect of merger and acquisition transactions; and those which finance anticipated, unguaranteed cash flows from short-term leases of long-lived equipment.

Equipment ABS has its drawbacks in common with most ABS asset classes. Particularly for a sponsor's first transaction, it may be daunting to devote the time and effort required to demonstrate to rating agencies and investors the soundness of the historical loss and delinquency data, its underwriting criteria, and its billing and collection procedures. The documentation and procedures needed to create a bankruptcy remote, special purpose entity ("SPE"), transfer the assets, and issue the Equipment ABS are considerably more extensive, costly, and complex than for a typical bank credit facility.

Opportunities exist for Equipment ABS to overcome these perceived difficulties. For example, electronic chattel paper may provide the ease of electronic vaulting for transition of contracts from the originator; to a pledge to a warehouse credit provider or ownership by an SPE (although ECP is not legally a superior alternative to paper-based chattel paper). Electronic Filings have simplified UCC filings to perfect the security interest of the indenture trustee for the ABS investors. A second significant opportunity lies in new asset classes, such as solar leases, security alarms and backup data centers, along with mature reemerging sectors, such as aircraft leasing.

Equipment ABS also faces threats. For instance, commentators have observed that any rise in interest rates perhaps could cause equipment finance companies (along with originators of other asset classes) and lenders to reduce their use of securitization. Regulations, especially at the federal level, also pose a threat. For instance, disclosure requirements (including risk retention methodology disclosure, starting December 24, 2016) under Dodd-Frank could deter sponsors from using Equipment ABS to monetize their equipment-backed receivables. Another threat arises from the Dodd-Frank section mandating that the Securities and Exchange Commission develop methods—including, perhaps, random assignment of a rating agency to rate any securitization—to break the supposed oligopoly of a few rating agencies.

Recommendations by the American Bankruptcy Institute's commission to reform the Bankruptcy Code could make secured lending less attractive if some of its recommendations were enacted by Congress.

But as equipment finance has weathered financial and regulatory storms of the past 50 years, it is likely that Equipment ABS will succeed as well and in so doing, enable equipment finance to maintain its upward momentum. One ELFA member company has stated that "even after the crisis, we have seen that this market remains robust.... As long as equipment leases perform, which historically they have, the securitization markets will remain open to our industry."

What is Securitization?

Securitization is the process whereby a large number of financial contracts, receivables or, in some instances, long-lived operating assets (constituting a representative sample of the originator's, seller's or lessor's entire portfolio, i.e., no adverse selection of assets for the ABS deal) are transferred by the originator, seller or lessor to a bankruptcy-remote entity which (directly or indirectly) issues a new financial instrument either collateralized by, or representing an ownership interest in, the financial contracts and the receivables. Investors and rating agencies examine the historical loss, delinquency and performance statistics for the sponsor's owned and managed portfolio, and compare it to the level of credit enhancement provided in the transaction structure to cover a multiple of historical losses and fully repay the debt.

Regardless of asset class, and whether the securities are sold in a registered public offering, a Rule 144A sale, or a private placement, rating agencies are the gatekeepers for Equipment ABS. Notwithstanding the scrutiny which the rating agencies have suffered as a result of the performance of rated mortgage-backed securities during the Great Recession, institutional investors still rely on ratings to determine whether they will purchase particular classes of the securities and investment bankers still utilize ratings to price (i.e., to assign a coupon interest rate) each class of securities.

There are ten rating agencies which have received the designation as a "nationally recognized statistical rating organization" ("NRSRO"). Thirty years ago, Moody's Investors Service, Inc. and Standard & Poor's were the only NRSROs rating Equipment ABS. Those agencies, plus DBRS, Fitch Ratings, and Kroll Bond Rating Agency ("KBRA"), appear to have rated the substantial majority of Equipment ABS during the period 2011-2014.

Each of those agencies has published methodologies which alert potential issuers and investors to the analysis which that agency will apply to an issuance of Equipment ABS. Warning: some readers may find that portions of the following text involve advanced legal terms and concepts. For that reason, a glossary appears at the back of this Report.

DBRS

DBRS is a privately owned and independent rating agency that was founded in Toronto in 1976 and has been rating Equipment ABS since 2005, including 11 warehouse and 26 term Equipment ABS since January 2011. DBRS employs many of the same criteria as the other agencies, but also states that it must be satisfied with the legal documentation of the securitization transaction. However, while documentation such as certificates and opinions provide useful sources of support and assurance, there are other elements that must be satisfied through the structure and safeguards built into the actual transaction. As such, DBRS has stated that it will only make a ratings determination once the transaction has been determined and the documentation has been provided in its entirety.

Bankruptcy Risks and True Sale. DBRS emphasizes the importance of the transfer of the assets from the originator to the SPE through a "true sale". Whether a transfer is considered to be a true sale rests not only on the intent of the parties, but also on whether all the "benefits and burdens of ownership have been transferred for a price that represents a fair market value" of the transferred assets." DBRS, along with other rating agencies, require a True Sale Opinion to be issued by the relevant legal counsel. [DBRS – Methodology: Legal Criteria for US Structure Finance Transactions – p. 6]

Bankruptcy Risks and Non-Consolidation. The necessity of non-consolidation is also a product of the risks associated with maintaining the pool of assets isolated from the originator, and possibly other participating entities. Substantive consolidation is an equitable remedy in which a bankruptcy court can ignore the corporate structure and existence of separate entities and ultimately treat all the entities as one. The effect of such a determination is that the creditors of each consolidated entity can reach the assets of the other previously separate entities. This would create a problem if parent company creditors could access the collateral for a securitization. To that end, DBRS also requires a legal opinion that covers the non-consolidation concerns. [DBRS – Methodology: Legal Criteria for US Structure Finance Transactions – pp. 8-9]

The rating process examines several key elements: 1) strength and quality of the originator and servicer; 2) asset quality; and 3) the legal structure of the securitization. Even though an ABS is structured so that the assets are isolated from the bankruptcy of the seller or servicer, and the investors have a first priority security interest in the contracts and the receivables, the analysis reviews the sponsor's operating history, management, contract underwriting criteria, liquidity, and contract origination strategy. (All of these elements are especially important where the sponsor itself is to be the servicer of the contracts, equipment, and receivables, since the ABS investors will be dependent on the servicer to bill and collect the receivables and enforce the contracts whenever an obligor becomes delinquent or defaulted.)

The sponsor's contract underwriting criteria and origination strategy are important because the rating agencies and investors need to know whether the former are so loose that few applicants are rejected as well as whether the criteria have been place long enough that the sponsor's historical loss and delinquency data are a reliable projection for obligor defaults once assets have been sold to the SPE and pledged as collateral for the Equipment ABS. It also is necessary to evaluate the sponsor's reliance on third party vendors to acquire leases and loans for its portfolio, and to determine whether certain vendors produce a significant portion of the sponsor's portfolio—and if so, then what are the approval rates for assets historically proffered by that vendor, and what has been the historical loss and delinquency data for assets actually sold by that vendor to the sponsor.

KBRA

KBRA summarizes its methodology as follows:

"KBRA's rating of an equipment-backed receivable securitization incorporate the originator and servicer's operational and financial strength, the quality and expected performance of the underlying assets, and an analysis of the transaction structure…Weak economic conditions can negatively impact the performance of an equipment lease transaction due to higher losses and delinquencies. As such, KBRA will incorporate macroeconomic factors into the expected cumulative gross loss ("CGL") and the stress multiple applied in the rating process. During the financial crisis, equipment lease ABS, with few exceptions, performed better than other securitized sectors, most notably RMBS and CMBS transactions."

KBRA postulates that [e]quipment lease originators generally fall into two major categories: captive lessors and independent lessors, the latter being classified by their size and whether they are affiliated with a commercial bank. Equipment ABS sponsors also are segmented according to the equipment type; the kind of contract used to finance the equipment; and whether they originate the assets or depend on third parties to originate leases and loans and sell them to the ABS sponsor.

KBRA review of asset quality centers on several factors: 1) whether there are asset concentrations arising from any particular obligors, manufacturers, industry groups, geographic regions, or equipment types; 2) whether the contract terms are sufficient to create an enforceable contract under which the ABS investors can realize the rights and remedies essential to enforcing and receiving the receivables—and in particular, whether each contract meets (typically, three dozen or so) standard contract criteria; and 3) what has been the sponsor's portfolio history of gross losses, recoveries from remarketing equipment under defaulted contracts, and resulting net losses after application of recoveries. KBRA applies an actuarial approach (instead of attempting to estimate losses for each contract) if the contracts were originated "using similar underwriting policies and procedures as those in the proposed pool" and "the pool is well diversified with no single obligor that exceeds 2% of the pool balance." KBRA also will scrutinize the financial stability of significant vendors and the role, if any, which a vendor may play in assisting the sponsor in enforcing a defaulted contract or realizing upon the residual value of the equipment at the expiration of the lease term.

In this latter respect, seasoning of the pool to be securitized is important. KBRA declares that "seasoning may result in increased expected losses if the rate at which the pool defaults is lower than the rate that the pool is amortizing." The historical experience of residual realization also is crucial in KBRA's determining how much credit enhancement to require before notes collateralized by a particular pool can receive the desired rating.

The third major category of KBRA analysis is devoted to structural and legal analysis. The assets must be isolated from the bankruptcy of the sponsor, so that the contracts and receivables will not be "property of the estate" within the meaning of Bankruptcy Code section 541. Additionally, the receivables cannot be subject to the automatic stay under Bankruptcy Code section 362; that is, if the indenture trustee for the ABS investors receives payments from the obligors under contracts in the collateral pool of lease or loan contacts, then the trustee in bankruptcy for the sponsor will not be able to recapture those amounts as "property of the estate" of the sponsor.

Additionally, KBRA will require an opinion of counsel for the sponsor, not only with respect to the 541 and 362 issues described above, but also that (for "true" leases constituting an executory contract under the Bankruptcy Code) the contract could not be rejected by a trustee in bankruptcy for the sponsor if the latter were to become bankrupt or be the subject of reorganization proceedings. This requirement is a natural outgrowth of the essential element that the assets be isolated from the insolvency of the sponsor.

Moody's Investors Service Inc.

Moody's most recently updated its criteria in January 2015 in "Moody's Approach to Rating ABS Backed by Equipment Leases and Loans." As with the other agencies, Moody's evaluates the credit quality of the obligors under the contracts; the type of equipment; the loan to value ratio; and any industry or geographical concentrations which might unduly stress the performance of the collateral pool in the event of an economic downturn. Moody's also investigates the originator's historical residual realization experience, not only if the originator wishes to securitize a portion of the booked residual values, but also to determine how much credit enhancement can be attributed to projected residual values. True leases also require Moody's to "evaluate the extent to which lessee bankruptcies could endanger cash flow to investors, through rejection by the bankrupt lessees of the lease contracts." (Moody's, page 3.) The agency uses both qualitative (such as the originator's underwriting criteria) and quantitative (such as the originator's historical recovery rate for equipment under defaulted contracts) factors.

Moody's legal analysis, not surprisingly, focusses on overcoming the bankruptcy risk of the originator; set-off risk (whether the obligor could set off amounts which it owes under the contract against any sums which it claims that the originator owes it, under that contract or any other relationship); and the risk of the servicer's commingling collections under the contracts with other amounts on deposit in its master lockbox account. The Moody's methodology helpfully discusses special risk characteristics such as: balloon loans; uneven- and seasonal-pay contracts; security deposits; and net leases versus contracts under which the lessor is obligated to perform certain services or pay certain amounts (such as insurance premiums or property taxes).

Standard & Poor's Ratings Service

Standard & Poor's rating methodology involves the determination of what exactly is necessary to support a perfect AAA credit rating. Standard & Poor's has indicated that such a determination is made by estimating the magnitude of losses if the underlying assets were to undergo severe conditions of stress. Generally, Standard & Poor's will compare the underlying assets with assets falling under that particular class. In other words, an underlying pool of equipment leases will be compare to other pools of equipment leases. However, there are occasional situations in which the underlying pool of assets are more novel and Standard & Poor's does not have historical studies of the asset class. In those unusual situations, Standard & Poor's will attempt to compare the underlying pool of assets to that of a comparable or similar asset class in which historical data is available. [S&P – Principles of Credit Ratings p. 9].

Standard & Poor's also takes into account many of the factors previously mentioned and employed by KBRA, including the strength and quality of the originator and underlying assets. Additionally, other areas that Standard & Poor's regularly takes into consideration when issuing a credit rating are: (i) legal and regulatory risks; (ii) payment structure and cash flow mechanics; (iii) counterparty risk; and (iv) notching and analysis of specific instruments.

Legal and Regulatory Risks. Standard & Poor's specifically focuses on the special purposes vehicle ("SPE"). During the securitization process, the degree of credit stability associated with the product largely depends on how well isolated the underlying assets are from the main legal and regulatory risk of bankruptcy and insolvency of one of the participating entities. Standard & Poor's has noted that the most important entity in this stage of its rating analysis is the originator or the previous owner of the underlying assets, although the isolation from other entities may also be important. [S&P – Principles of Credit Ratings p. 4]

Payment Structure and Cash Flow Mechanics. An analysis of the payment structure and cash flow mechanics specifically addresses whether the predicted cash flow would be sufficient to cover the payments of interest and principal of the securities while also taking into account relevant fees, expenses and credit enhancements that may be earlier in priority. Standard & Poor's employs quantitative models in order to evaluate the payment structure and cash flow mechanics of a given securitization deal. [S&P – Principles of Credit Ratings p. 4]

Counterparty Risk. Counterparty risk specifically refers to the risks associated with third-party obligations to either (i) hold the underlying assets or (ii) make certain payments that may affect the creditworthiness of the notes. One common example of counterparty risk to which Standard & Poor's refers is that of derivative contracts such as foreign exchange and interest rate swaps. Standard & Poor's typically looks to both the degree of dependency on the third-party and the rating of the counterparty. [S&P – Principles of Credit Ratings p. 6]

Notching and Analysis of Specific Instruments. Standard & Poor's also evaluates the "priorities within an obligor's capital structure and the potential effects of collateral and recovery estimates in the event of the obligor's default." This analysis often involves the application of "notching" to instruments depending on where such instrument ranks relative to the obligor's senior, unsecured debt. [S&P – Principles of Credit Ratings p. 7]

Recent Issuances and Ratings Actions

LEAF Receivables Funding 10, LLC, Series 2015-1

LEAF Commercial Capital, Inc. ("LEAF") recently announced the issuance of a $336 million securitized portfolio of equipment leases and loans through LEAF Receivables Fund 10, LLC ("LEAF 2015-1"). [www.leafnow.com, LEAF Announces Securitization of $336 Million of Leased Assets]. The LEAF 2015-1 issuance featured nine classes of notes that were rated by Moody's and DBRS. Moody's indicated that its ratings rationale was predominantly driven by the following factors: (i) the credit quality of the underlying collateral; (ii) the historical performance of other LEAF originations; (iii) the level of credit enhancement; (iv) the pay structure; and (v) the strength of the back-up servicer.

Moody's highlighted the diversity of the underlying collateral pool: diverse obligors, industries and locations. In terms of the historical performance, Moody's stated that LEAF has experienced "strong, stable performance" including its four prior transactions and its own manager portfolio. The credit enhancements included overcollateralization, subordination, a non-declining reserve account and excess spread. Additionally, the pay structure provided additional credit enhancement noting that the sequential pay structure provides additional enhancement over time. Moody's also noted LEAF would be using some of the funds from the prefunding account to acquire additional contracts during the first three months of the issuance. However, the additional contracts will also be subject to certain concentration limits in order to ensure that the added contracts do not adversely impact the credit quality of the pool. [Moody's Investors Service, Rating Action: LEAF 2015-1]

Ascentium Equipment Receivables 2015-1 LLC

Ascentium Equipment Receivables 2015-1 LLC ("ACER 2015-1") recently announced the issuance of $330 million small ticket equipment-backed notes. [AscentiumCapital.com, News, Ascentium Capital Announces $330 Million Securitization]. The Series 2015-1 issuance represented the third securitization for Ascentium Capital since 2012. The Series 2015-1 notes received Aaa and AAA ratings from Moody's and DBRS, respectively. According to Moody's, the notes were backed by small ticket equipment contracts used primarily for commercial purposes in a wide array of industries, including physician offices, gas stations, hotels and restaurants. Moody's provided some background on its Aaa rating action and indicated that the rating was based on the "quality of the underlying equipment contracts and their expected performance." [Moody's Investors Service, Rating Action: ACER 2015-1 LLC]. Moreover, Moody's indicated that it analyzed the credit quality of the underlying pool of contracts, compared the issuance with the historical performance of comparable issuers, and the ability of the servicer, Ascentium Capital LLC, to perform the servicing functions.

GreatAmerica Leasing Receivables Funding LLC, Series 2015-1

GreatAmerica Leasing Receivables Funding, L.L.C. ("GreatAmerica 2015-1") issued a $452.6 million securitization in March 2015. The issuance featured six different classes of notes rated between F1+sf and Asf. The ratings were conducted by Fitch. Fitch highlighted a few "drivers" behind its ratings determination. First, the GreatAmerica 2015-1 issuance contained a high concentration of copiers and printers (67.4%). Fitch compared this concentration with that of prior GreatAmerica issuances and noted that the 2015-1 concentration of copiers and printers was nevertheless lower than that of prior issuances where the concentration was between 69%-76%. Typically, a high concentration is deemed to be less favorable that a diverse pool. However, Fitch indicated that copiers and printers have historically outperformed other equipment types and therefore would not adversely impact their ratings determination. Second, Fitch highlighted GreatAmerica's "improving asset performance." In other words, GreatAmerica's asset pool had recently experienced better "loss performance" within more recent "vintages of the managed portfolio." Additionally, all GreatAmerica securitizations have yielded cumulative net losses within Fitch's initial prognoses. Third, Fitch noted GreatAmerica's credit enhancement which included robust hard credit enhancements for the Class A, B, and C notes. Also, all classes of notes benefited for 6.28% in booked residuals. Lastly, Fitch noted GreatAmerica's impressive track record in its role as originator, underwriter and servicer and the legal structure in place that would shield payments in the case of a bankruptcy. [Fitch Rates GreatAmerica 2015-1]

Prior Studies

Board of Governors of the Federal Reserve System 2010 Risk Retention Report

The Board of Governors of the Federal Reserve System (the "FRB") published a report in October 2010 (the "FRB Report") in response to the Great Recession and the new regulatory framework to be implemented as a result of the Dodd-Frank Act. The report was issued in anticipation of new risk retention requirements that would eventually be codified as Section 941 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"). The report focused on eight different loan categories that underlie the most significant securitization activity: (1) nonconforming residential mortgages ("RMBS"), (2) commercial mortgages ("CMBS"), (3) credit cards, (4) auto loan and leases, (5) student loans, (6) commercial and industrial bank loans ("CLOs"), (7) equipment loans and leases, and (8) dealer floorplan loans. [p. 5 of the FRB Report]. Furthermore, the FRB grouped the foregoing eight loan categories into three broader groups: (1) real estate (includes RMBS and CMBS), (2) consumer finance (includes credit cards, auto loans and leases, and student loans) (3) business finance (includes, CLOs, equipment loans and leases and dealer floorplan loans).

Not surprisingly, the Fed revealed that securitizations of RMBS and CMBS dropped drastically after the financial crisis. [p. 6 FRB]. Furthermore, at the time of the FRB Report these real estate related securitizations had not shown any signs of rebounding. However, both consumer finance and business finance securitizations, including equipment leases and loans, had begun showing signs of increased issuance activity. In fact, the FRB Report indicated that, at the time of that Report, equipment loan and lease securitizations had rebounded to nearly pre-crisis levels. [p. 40 of FRB Report]. As this Report will discuss later, equipment lease and loan backed securitizations have continued to increase since 2010, reaching record-setting issuance amounts in 2013.

The FRB Report addressed each asset category and provided useful background information, as well as the risks and performance associated with each asset category. In a general sense, the FRB noted that all financial assets generally suffered a decline, in new issuance and in performance, during the crisis [pp. 49 of FRB Report], pointing to two main factors. First, all structured products suffered from an abrupt drop in liquidity in 2008. Secondly, there was a sharp increase in Obligor delinquencies and defaults underlying these structured products, although equipment loans and leases continued to perform as expected. The reduction in issuance volume arose largely from the reduction in construction-related equipment lease and loan ABS issuances during the financial crisis. The FRB explained that equipment used for construction of residential and commercial properties suffered significantly because the difficulties surrounding the real estate market led to greater Obligor defaults. [p. 63 of FRB Report]. This was an important revelation that further demonstrated the credit strength of a diversified collateral pool of equipment loans and leases.

The FRB Report reviewed a number of credit enhancement features. Before 2008, a common credit enhancement tool was third-party bond insurance. [p. 51 of FRB Report]. Additionally, the FRB highlighted two credit enhancements associated with equipment ABS issuances: (1) securitizers commonly hold the equity interest in the Equipment ABS issuer and (2) like auto ABS issuances, equipment ABS issuances feature relatively short maturities which cause the underlying equipment loan to experience increased credit enhancement over the life of the security, because the equity interest is not reduced to the same extent that the ABS debt is amortized. [pp. 51 and 63 of FRB Report]. The FRB observations supplement other features of Equipment ABS, such as agency – or investor-mandated floors on reserve account balances, and the back-end loaded nature of equipment residuals.

The FRB report stated that although the Equipment ABS sector emerged unscathed from the Great Recession, post FRB report issuances still were expected to offer heightened credit protections, including larger subordinate tranches, increased overcollateralization, or larger reserve accounts. [p. 51 of FRB Report]. However, the FRB noted that the increased credit protections required by investors in Equipment ABS would be modest compared to that of many of the other asset categories.

Equipment Lease Securitization Performance Versus Other Asset Classes

The Foundation published its own study in 2011, titled "Equipment Lease Securitization Performance Versus Other Asset Classes" (the "ELFF 2011 Study" or the "Study"), which evaluated the risk factors and performance of Equipment ABS compared to other major asset classes during and since the 2008 financial crisis.

The ELFF 2011 Study provided a more in depth look into the characteristics of Equipment ABS and further distinguished ELL loans and leases by categorizing issuances between loans or finance leases and operating leases. [ELFF 2011 Study p. 13]. Additionally, the ELFF 2011 Study identifies various risk determinants. The Study highlighted that like many other types of asset-backed securities, defaults and delinquencies are the main credit risks.

Similar to the FRB's findings, the ELFF 2011 Study revealed that Equipment ABS outperformed nearly all other asset classes, as well as stocks, corporate bonds, and real estate. [ELFF 2011 Study p. 5] Indeed, ELL-ABS fared so well that the only asset class that outperformed this group were US Treasury securities – widely considered the safest possible investment product and which benefitted disproportionably from the FRB's quantitative easing policy and the consequent low interest rate environment. Additionally, although ELL-ABS reached record high delinquency rates in 2009, the rates of delinquencies and defaults appeared to be on the decline.

Specialty Equipment ABS Asset Classes

Automobile Leases

Vehicle leases (both autos and trucks) have been securitized for over twenty years, once titling trusts were created to overcome the DMV paperwork and cost which otherwise would be attendant to a true sale of the vehicles and lease or loan contracts to the SPE.

Structure

Typically, a vehicle dealer will lease the vehicle to the lessee and transfer the contract and vehicle to a finance company, which then contributes ownership to a titling trust (as discussed below). The lessee makes its monthly lease payments to the finance company.

To securitize auto leases, the finance company must transfer the leases and the vehicles to a bankruptcy remote entity so that any creditors of the finance company cannot claim an interest in the leases or vehicles. Finance companies transfer the ownership of the vehicles to a titling trust, a bankruptcy remote entity, which remains the owner of such vehicles until the vehicle is sold, repossessed upon a lease default or returned upon lease maturity. When the finance company seeks to securitize the auto leases, it transfers, pledges or otherwise assigns the leases, and the underlying vehicles, indirectly to investors, as discussed directly below, it avoids having to comply with state retitling laws requiring that vehicles being sold be retitled and reregistered in the new owner's name. DBRS' "Rating U.S. Auto Lease Securitizations" (October 2014) notes that a few states do not recognize titling trusts as the legal vehicle owner, so in those states, that structure cannot be used.

In an auto lease securitization, the titling trust issues to the finance company certificates for special units of beneficial interest ("SUBI") which represent an interest in certain identified titling trust assets, including the vehicles owned by such SUBI. (The interest represented by a SUBI Certificate is akin to a beneficial interest in an owner trust, rather than a participation interest in a stream of lease rentals.) Assets held by the trust that aren't covered by a SUBI certificate cannot be reached by investors investing in those SUBI certificates. The SUBI certificate is then transferred by a true sale to the SPE which will issue the Equipment ABS.

Vicarious Tort Liability

Typically, a party experiencing loss because of a third party's negligence can only look to that negligent third party to recover such loss. Prior to 2005 investors in auto leases feared that, under the doctrine of "vicarious tort liability," however, the vehicle owner could be liable to someone damaged by the lessee's negligence.

As noted in DBRS' "Rating U.S. Auto Lease Securitizations," the Transportation Equity Act of 2005 addressed this concern by prohibiting parties from seeking damages under vicarious tort liability when the principal is a vehicle leasing or rental company (including securitization trusts). This act also preempts any state law providing otherwise. Because this preemption is challenged from time to time, each securitization with sizable exposure in a state which has not judicially resolved such a challenge should address these vicarious tort liability concerns.

Vehicles as Assets

Rating agencies focus on certain collateral characteristics when rating auto lease securitizations. One characteristic is the term of the lease because the longer the lease, the more uncertainty regarding the depreciated value and the resale market. Furthermore, because having a large number of pooled leases ending at the same time could be problematic if there is a weak resale market, rating agencies consider the distribution of remaining terms. Vehicle age, make and model are all considered by rating agencies. DBRS mentions that the majority of Securitized leases are for new cars, but some high-end brands lease certified pre-owned cars. Distribution of vehicle make and model also is important, to diversify the risk associated with any particular vehicle.

Mining, Agricultural, and Construction Equipment ("MAC")

CNH Industrial N.V. is an established agricultural equipment manufacturer which has securitized its installment sale and secured loan receivables for at least fifteen years. Its most recent issue, in March 2015, consisted of approximately $800 million of ABS, rated Aaa or (for the juniormost class of ABS) A2 by Moody's. Factors contributing to those high ratings are the anticipated resale values of the new and used equipment; the servicing capabilities of affiliate New Holland Credit Company; the initial 4.50% credit enhancement level for the Class A Notes; and the overall strength of the US economy and agricultural markets in particular.

Moody's January 2015 "Approach to Rating ABS Backed by Equipment Leases and Loans" further identifies some factors which are relevant to rating agricultural equipment receivables: its long-term historical data which indicates "very little volatility in the agricultural equipment industry" (page 25, footnote 45); and the frequent use of flexible obligor payment terms, which coincide with the harvest time or other seasonal anticipated cash flow to the obligor under the lease or loan contract (page 31). These factors are pertinent to all agricultural equipment vendors and financiers.

One exciting development has been the selection by Unidroit [See Glossary at page 40] of MAC equipment for a Protocol under the Cape Town Convention on International Interests in Mobile Equipment. ELFA has appointed members of its Unidroit Protocol Subcommittee to work with the Unidroit MAC Working Group so that the interests of the financial community are represented during drafting of the Protocol. To the extent that a new Protocol succeeds in establishing a uniform method of perfecting ownership or security interests in this kind of equipment, which can move across national borders, then securitization of MAC receivables could be broadened to encompass more than equipment located in the United States and Canada. This has been the experience of the equipment finance community after the Protocol (to the Convention) "on matters specific to Aircraft Equipment" succeeded in extending financing-friendly, uniform rules to more than sixty jurisdictions worldwide; both the number of aircraft users eligible for financing, and the ease with which transactions could be accomplished, increased markedly.

Operating Assets

Not every equipment finance lease extends for several years. Operating asset securitization uses the cash flows from repeated short-term leases of long-lived assets, during a time period covering a reasonable portion of the remaining useful life of the assets. Examples of operating assets that have collateralized securitization transactions included marine containers, railcars and aircraft. These securitizations do not fit the typical securitization paradigm because the contractual rentals do not amortize a meaningful amount of equipment cost (or the original principal amount of the Equipment ABS); the number of obligors in the pool are insufficient to provide the wide diversification required by rating agencies to apply an actuarial approach (as opposed to separately evaluating every obligor in the pool); and the leases sometimes are not the typical net, hell or high water obligations.

Because these operating asset securitizations involve leases that are not full payout contracts, the financings require ongoing re-leasing and re-marketing, by an operating company experienced with that kind of equipment (referred to as the Manager). In a typical transaction, the sponsor is a leasing company that assumes the manager role. The remarketing of operating assets creates uncertainty from the ongoing leasing of the assets. Therefore, ABS notes issued in an operating asset deal typically include performance triggers and an expected maturity date that is several years prior to the legal final maturity of the securities. A breach of triggers or failure to repay the debt by the expected maturity typically results in a rapid amortization event which accelerates the debt and prohibits equity payments until the trigger is cured or the debt is repaid.

Operating asset securitizations largely have involved transportation equipment, with containers predominating because the diversity of the asset-backed pools included in the transactions. Aircraft, aircraft engines, railcars and chassis round out the "usual suspects" as the subjects of operating asset securitizations, but other transactions have included mobile office units or portable gas compressors. The common element among these assets classes is long lived classes that hold value over a long period of time and require remarketing to generate cash flow

Like typical securitizations, assets in an operating asset securitization must be transferred to a bankruptcy-remote, special purpose entity, and the originator must provide true sale and non-consolidation opinions, as to itself and the SPE. Credit enhancement typically consist of excess cash flow, and equipment residual values, measured in terms of loan-to-value ("LTV") of the underlying assets, along with cash reserve accounts or credit facilities that support the transaction's liquidity, Operating lease securitizations also have an indenture under which the ABS notes are issued and an indenture trustee which acts as secured party for the noteholders. The indenture trustee must have a first priority, perfected security interest in the assets or (if the assets are owned by a titling trust) in the beneficial interest in the assets. Most transactions include restrictions which guard against equipment type, lessee or jurisdictional concentrations. Lease payments are typically directed to the lessor's lockbox account and must be swept to an account controlled by the indenture trustee on a daily or other short-term basis.

Operating assets also have unique features which differ from a pool of financial assets. The valuation of assets is a primary factor in analysis. On any given pool of operating assets, the fair market value, rate of depreciation and useful lives of the assets must coincide with the minimum and target amortization profile of the ABS debt. These elements work together to determine the expected LTV of the transaction over its life. In addition, cash reserve or a liquidity reserve account provides the ability to meet interest payments during periods of downtime when assets may be off-lease. Interest rate hedge agreements are essential, because the short-term leases mean that rental cash flows are based on floating rates of interest, while the ABS notes pay a fixed rate of interest.

Despite the ongoing asset management in addition to routine billing and collecting, most operating asset ABS transactions do not contain a backup manager, because most candidates for the replacement manager are likely to be competitors of the originator. However, transitional provisions are frequently included in ABS transactions including the requirement that the originator's servicing records to be sent monthly to a third party such as the indenture trustee or document custodian. If a replacement servicer is needed, then the new servicer (generally chosen from among the originator's competitors) will have immediate access to the information necessary to take the required actions to maintain the assets' value.

Further complexities may arise in intercreditor arrangements for matters involving the isolation of cash flows from a lessor's lockbox, should ABS funds be commingled with general corporate cashflow. A master intercreditor agreement is advisable to identify and isolate those cash flows that belong to the securitization, and those the lessor owns outright or that are pledged to other secured parties. This is a feature of all operating asset ABS and not necessarily part of other Equipment ABS.

In addition, periodic appraisals are often required to monitor the asset value of the equipment over the life of the deal. If post-closing valuations disclose that the assets are worth significantly less than the expected values at closing, then "turbo" amortization of the ABS may be triggered, and excess rentals otherwise payable to the issuer will be diverted to more rapid payment of principal on the notes, in order to restore the desired loan to value ratio.

Containers

Since the mid 1990s, container leases have been securitized using both the traditional ABS methodology and the operating asset approach. Containers comprise a substantial portion of Equipment ABS but differ markedly from other equipment classes in several respects.

Underlying Leases

According to KBRA's "Container Lease ABS Rating Methodology" (April 19, 2012), lessors typically enter into one of three types of container leases: master lease agreements ("MLAs"); term leases; and direct finance leases ("DFLs"). A number of container leasing companies utilize MLAs, which are short-term leases (typically less than a year in duration) that permit lessees to return the containers at will. Recently, container leasing companies have been moving away from MLAs in favor of term leases that restrict lessees from returning containers until the end of the lease term (generally three- to seven-year durations). Use of term leases ensures that these companies maintain cash flow levels and have fewer off-lease containers. The companies that still utilize MLAs often subject lessees to penalties for the premature return of containers during economic downturns.

DFLs are lease-purchase arrangements with a usual term of seven to ten years. Because the lessee in a DFL is the beneficial owner of the containers (and hence the DFL may be treated as debt in a bankruptcy of the lessee), securitizations are likely to include DFLs only with highly creditworthy lessees and typically with additional concentration restrictions on such lessees.

Useful Life

While containers typically are depreciated over a 15-year period, leasing companies aim to sell the containers earlier, such as year 12 in the secondary market (e.g., used for storage, additional refrigeration space, etc.). Most lessors resell the containers for more than their net book value near the end of their useful life. In times of high demand, the containers can be leased beyond their useful lives.

Management Fees

In container lease securitizations, container fleets are transferred from the sponsor/originator to the SPE, often a master trust. Within the few categories of containers, the "boxes" are fungible and hence the manager of the fleet has the flexibility to remarket a container depending on the depot at which the box has been returned. Except in the most rigid term lease securitization, the manager performs a more active role than does the typical ABS Servicer. Hence, its substantial management fee covers frequent remarketing of the containers, as well as billing, collecting, and enforcing rental payments, but it typically does not cover direct operating expenses such as storage, repositioning, insurance and maintenance. Such expenses are paid through the ABS waterfall and are senior to principal and interest payments made to noteholders.

Replacement of Manager

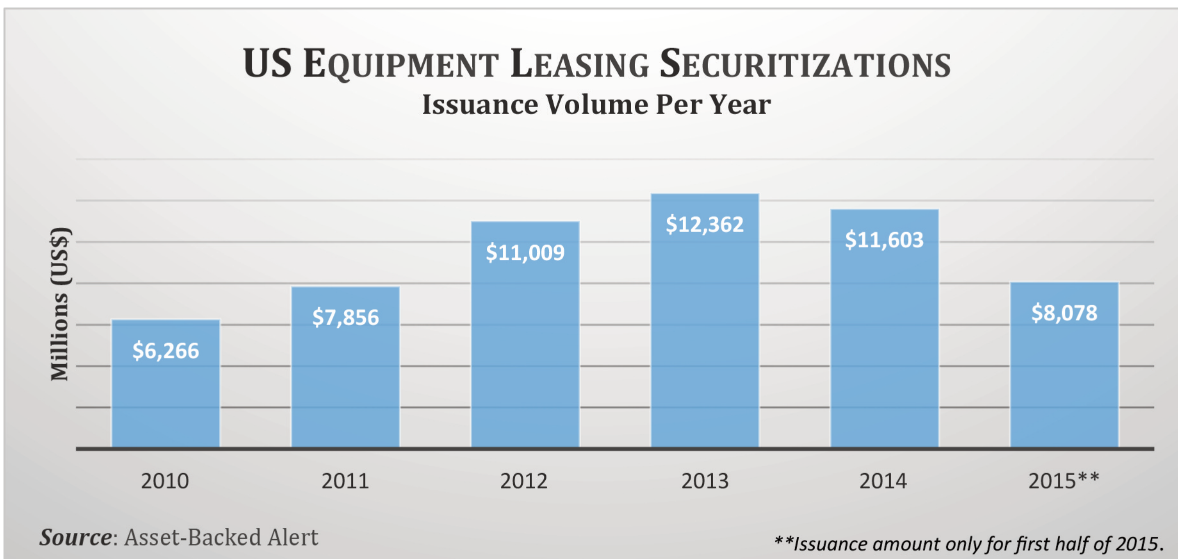
As mentioned earlier, container lease securitizations do not typically provide for a back-up manager, as traditional equipment lease securitizations do, should the manager (usually the sponsor/originator) be removed or not able to complete its obligations under the Management Agreement. (The reason for this is that the most capable back-up container managers are precisely the most avid competitors of the originator, which understandably does not wish a competitor to have daily access to its database of customers and business practices.) The Management Agreement provides that the controlling party has the right to replace the manager, but only for cause. Recently, some securitizations have provided for a transition agent, typically a bank or other intermediary with experience in the container industry, to assist with the process of engaging a new manager and transferring fleet information (e.g., backup data tapes) to the new manager. KBRA, as noted in its Container Lease ABS Rating Methodology, will rate transactions without a named back-up manager because in the past numerous container fleets have been successfully transferred to different managers for a variety of reasons (mergers and acquisitions, etc.).

Transaction Activity, 2011-2014

Issuance Volume Per Year

As a result of the 2008 financial crisis, all asset classes experienced a sharp decline in transaction activity. Because of the weak economy and unsettled market conditions, Equipment Lease Loans-ABS new issuance activity decreased during the period of 2008 – 2010. However, since 2010, ELL-ABS transaction activity has skyrocketed. During 2013, ELL-ABS experienced a nearly two-fold increase when compared to 2010 in total aggregate offering size. Moreover, as shown in Figure 1 below, every year since 2010 has featured an increase in ELL-ABS offering size compared to the previous year, except for 2014. Even so, 2014 only experienced a 10% drop when compared to 2013, which was a near-record breaking year. Since the inception of ELL-ABS securitizations in 1985, offering volume has only breached the $12 billion mark three times – in 1996, 1999 and 2013 (which currently holds the number two spot with $12.25 billion in total offering size, almost beating the all-time high of $12.5 billion in 1999). Data derived through the second quarter indicates that ELL-ABS is showing no signs of slowing, with $4.57 billion in ELL-ABS activity. If extrapolated, 2015 activity would reach nearly $18 billion in aggregate offering size for the year.

Figure 1



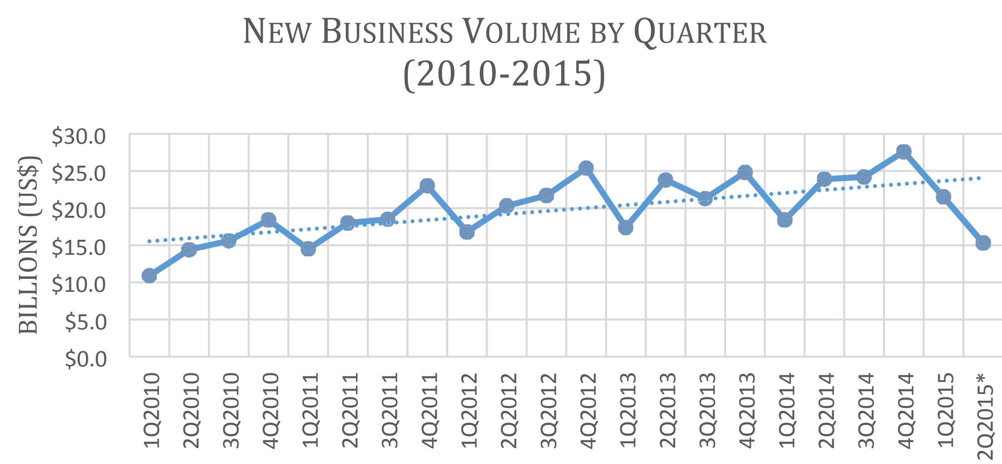
New Business Volume

As previously discussed, the ELFF 2011 Study included data through 2010. The ELFF 2011 Study analyzed the state of the equipment leasing industry at the time of its publication. With the help of the Equipment Leasing and Finance Association's Monthly Leasing and Finance Index ("MLFI"), the Study revealed several statistics related to industry performance and confidence levels. The MLFI compiles responses and quantitative data from 25 significant lessors. A key indicator derived from the MLFI is "New Business Volume" which reports new originations made each month. [ELFA, Monthly Leasing and Finance Index, *available at* http://www.elfaonline.org/Data/MLFI/].

The ELFF 2011 Study indicated that in mid-2009 New Business Volume began to decline and settled at a lower level through 2010. New Business Volume then began to increase slowly in 2011. Overall, the Equipment market was continuing to show signs of improvement at the time. As such, the general prognosis from market participants was that equipment leasing and loans would continue to increase.

Since 2011, new business originations continued to rise, albeit at a steady progressive pace. As shown in Figure 2 below, quarterly figures derived from MLFI's monthly New Business Volume reports shows an overall increase from 2011 through the second quarter of 2015. Additionally, although the first quarter of 2015 showed signs of decreased activity, perhaps as a result of normal seasonal variations, New Business Volume has consistently declined during the first quarter of each year. This first-quarter decline can be seen within Figure 2, when focusing on the first quarter of each year since 2011.

Figure 2



Source: ELFA

**Data only includes months of April and May.*

Equipment Lease and Loan ABS and Other Asset Classes

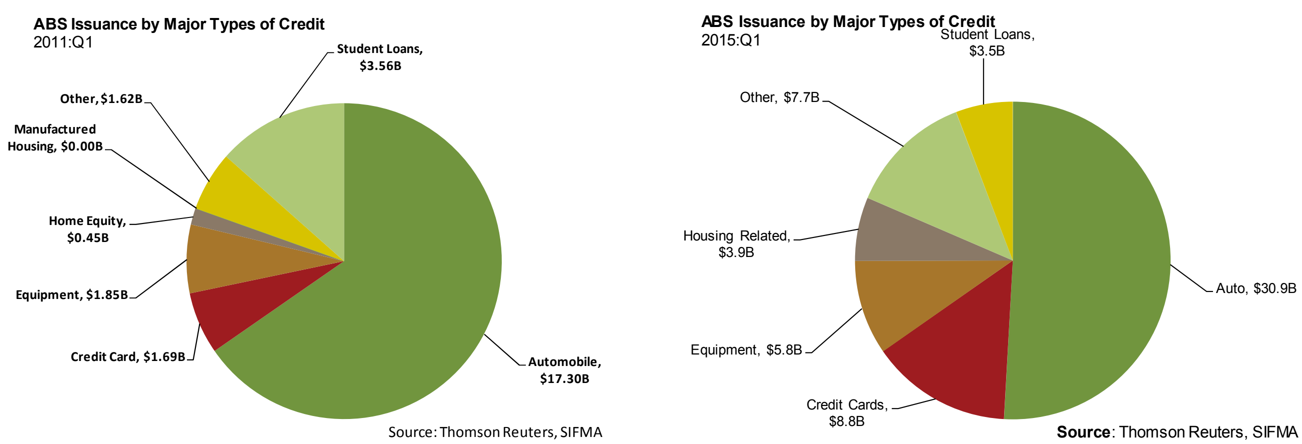
The asset-backed securities market is continuously evolving with the regular addition of new asset classes. However, there are a set of asset classes that dominate the securitization market. Real estate-related assets such as residential mortgages and commercial mortgages quickly come to mind, especially after the 2008 Financial Crisis when these products received heightened scrutiny and attention. Additionally, student loans have emerged as a significant category in recent years because of the boom in post-secondary attendance and rapid increase in tuition. Lastly, credit card receivables and automobile leases have been popular asset classes in the securitization realm.

The issuance of all asset classes experienced a decline during but in the two years following the 2008 Financial Crisis each asset class nevertheless underwent diverging paths during those years. For example, performance of Equipment ABS did not experience the same adverse results as RMBS and CMBS.

Although Equipment ABS was relatively unaffected by the 2008 Financial Crisis when compared to the other asset classes, the ELFF 2011 Study revealed that Equipment ABS only represented a very minor portion of outstanding asset-backed securities. [ELFF 2011 Study p. 11]. Because of this nominal representation, a comparison may not have been as useful to discern the equipment asset classes' relative performance. Surprisingly, at the time of the ELFF 2011 Study's publication, equipment ABS accounted for only $13.63 billion through the first quarter of 2011 – translating into less than 1% of the total US ABS market. The latest figures compiled by the Securities Industry and Financial Markets Association ("SIFMA") through the first quarter of 2015 reveal that outstanding Equipment ABS now represents around 4% of the total US ABS market.

Additionally, when compared to the 2011 data, equipment leasing and loan ABS issuances have continued to grow. As shown in Figure 3 below, during the first quarter of 2011, new equipment ABS issuances only reached $1.85 billion. The latest reports show that using the same metrics new Equipment ABS issuances reached $5.8 billion during the first quarter of 2015. This amounts to a 300% increase in a matter of only four years.

Figure 3



Risks and Credit Ratings Since 2011

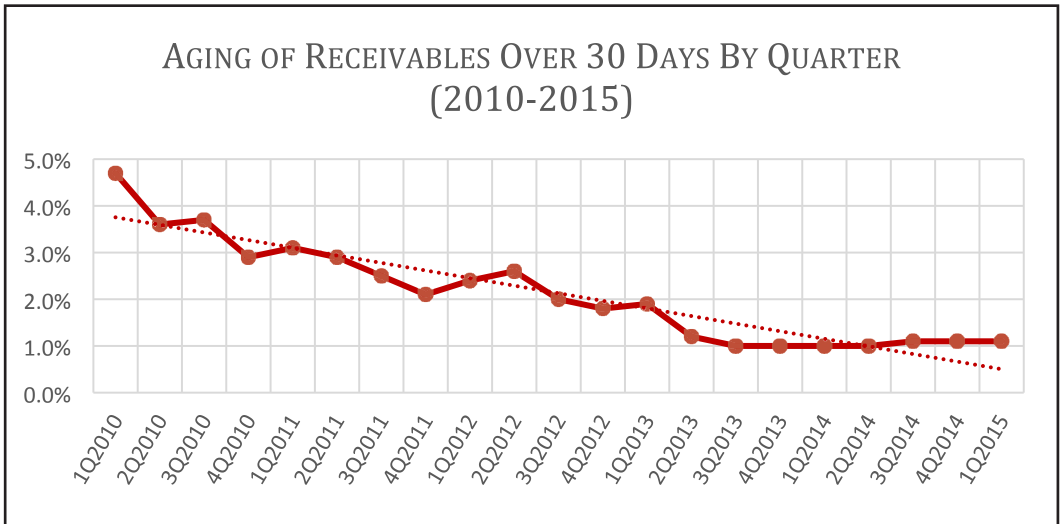
Standard & Poor's

Equipment ABS has gained a reputation for being an extremely stable and safe structured product. As recently noted by Standard & Poor's, when compared to the other popular asset classes, Equipment ABS has been identified as the asset class with the highest stability rate and lowest default rate ["U.S. Asset-Backed Securities Had High Credit Stability", Standard & Poor's Rating Services p. 6]. In particular, the Standard & Poor's report discloses that default rates remained at 0% as of 2013. Additionally, that report reveals that 2013 witnessed no downgrades of any Standard & Poor's ratings of Equipment ABS.

Aging of Receivables

In addition to the New Business Volume metric, ELFA also publishes figures on the aging of receivables, using data from member company respondents. The Aging of Receivables report identifies the percentage of receivables that have aged over 30 days. The percentage of receivables aged over 30 days at the time of the ELFF 2011 Study was only 3%. As of the first quarter of 2015, the percentage of aged receivables was down to a little over 1%. Generally, as shown in Figure 4 below, receivables aged over 30 days have decreased progressively since 2011 (the dotted line represents the trend as determined by regression analysis).

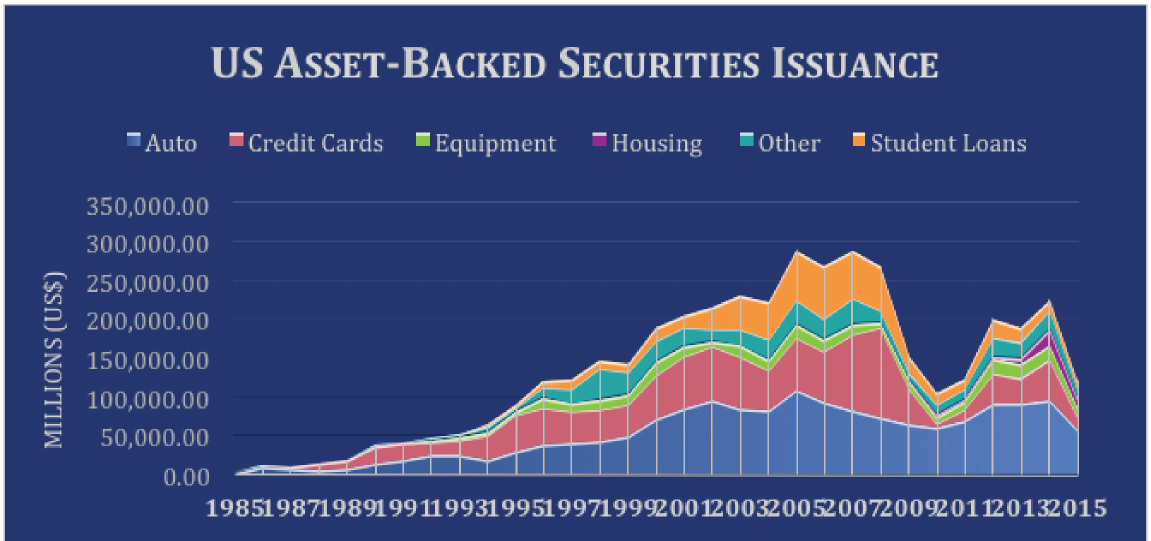
Figure 4



Source: ELFA

The final chart, Figure 5, on U.S. ABS Issuance during the past 30 years, discloses the wider swath that Equipment ABS (in green) has enjoyed during 2013-2014.

Figure 5



Source: SIFMA

Recent Changes in the Equipment ABS Marketplace

Equipment ABS has never ceased to evolve since its first deals were closed in April 1985. Four developments have been observed since 2011: increasing acceptance of securitizing projected equipment residual values; resecuritization of equity cash flows; sale of below-investment grade notes to third party investors; and diminished use of third party credit enhancement.

Equipment residual values have been one major element which has distinguished Equipment ABS from other asset classes. True leases differ from every other ABS asset class in that there are two elements of value in a true lease: the periodic, scheduled rental payments (which are equivalent to receivables arising from auto loans, trade receivables, or healthcare receivables); and the anticipated resale or re-lease value of the equipment at expiration of the term of a true lease. The equipment value in a true lease also provides a measure of credit enhancement to the ABS investors in a manner that differs from other kinds of contracts and asset classes. In an auto loan, for example, the obligor owns the vehicle but may lose its equity in that auto if it defaults under the loan. However, if it makes all the loan payments on time, it will own the vehicle free and clear and whatever value that the auto possesses at that time will redound to the owner rather than to the lender (or the securitized investors). Similarly, if the obligor defaults before the loan is fully repaid, any excess proceeds from disposition of the vehicle will flow to the obligor (the owner of the vehicle) rather than to the lender and the securitized investors.

But with a true lease—not just for autos, but for any kind of equipment—the proceeds of disposing of the equipment, whether at lease expiration or upon an earlier default, belong to the lessor and will flow through the securitization cash flow waterfall, after application to the unpaid rentals and liquidated damages under the related lease contract, for the benefit of the ABS investors (this differs from nontrue leases, which may require the lessee to purchase the leased equipment at a stipulated amount. In that instance, the residual value has been converted into just another part of the contractual cash flow.) In the early years of Equipment ABS, investors and rating agencies attributed no value to projected equipment residual values; whatever proceeds eventuated were available for the benefit of the ABS investors, but lessors could not increase the amount of the asset-backed securities to any extent, to reflect projected receipt of residual proceeds.

As recently as January 2010, the DBRS Methodology "Rating U.S. Equipment Lease and Loan Securitizations" declared that "uncertainty related to residual value amounts and timing of realization of those amounts has resulted in these values often only serving as additional credit enhancement" (page 16) and "the analysis also considers…a manager disruption event, any significant exposure to individual manufacturer or technology risk, and the required maintenance obligations for the related equipment" (page 24). Presciently, DBRS stated that "For credit to be given to residuals, the manager would need to supply several years of data to support the cash flow assumptions" (page 25). Five years later, an April 2015 Equipment ABS securitization, rated by DBRS, monetized a portion of the booked residual values, using the assumption that 30% of the projected residual value would be received six months after expiration of each true lease contract. Securitization of equipment residual values is now part of established Equipment ABS practice.

Resecuritization of ABS residual cash flows has existed for more than twenty years. First applied in the context of mortgage-backed securities, the concept involves a sponsor causing its wholly-owned subsidiaries (which have served as issuers in prior Equipment ABS) to transfer the cash flows to which they are entitled, pursuant to the cash flow waterfall of those previously closed Equipment ABS deals, to a newly-formed SPE. That latter company will either sell or pledge the aggregate anticipated cash flow to which it is entitled, and the purchaser or pledgee of the cash flow will advance a substantial percentage of that aggregate cash flow to the SPE, thereby taking the risk that each of the underlying ABS deals will produce the equity cash flow needed to repay the money advanced by that investor. A few of these (very private) transactions were accomplished in the Equipment ABS arena in the 1990s, but anecdotally, the pace recently has accelerated. In a sense, this is similar to the increased acceptance of equipment residual value securitization. Experienced lessors which have compiled a track record of residual realization and equity cash flows have been able to access this source of financing.

The search for enhanced yield by investors has led to another recent development: the sale of below-investment grade ("BIG") ABS notes to institutional investors which typically would not have purchased notes rated BB or B. This development is noteworthy because BIG notes have the potential to be treated as equity securities in the SPE rather than as "true debt" of the SPE. The concern is that if the BIG notes were equity rather than debt securities, then those investors would be treated as part owners of the SPE and distributions on the notes would be treated, for federal income purposes, as taxable dividends rather than as taxable interest and nontaxable return of principal. Although some tax partners at law firms have become comfortable with delivering legal opinions to the effect that such notes constitute "true debt" rather than ownership interests in the SPE, the prevailing view is that ABS notes need to be rated at least BBB, by at least one rating agency, in order to receive a "true debt" opinion.

One other recent development has been the decreased use of third party credit enhancement by sponsors to obtain higher ratings for (usually) the more senior classes of ABS notes. In part, this reflects the stress which the 2008 financial crisis placed on monoline insurance companies which historically provided financial guaranty insurance policies for mortgage- and asset-backed securities. As those insurers were downgraded, the incremental value (in the form of lower interest rates on the insured Equipment ABS) of their "wraparound" insurance policies declined and hence it became uneconomic for sponsors of Equipment ABS to pay the premiums and incur the increased transaction costs for third party credit insurance. Recent travails of the Commonwealth of Puerto Rico and its agencies also have affected investors' perceptions of those credit insurers which have backstopped Puerto Rico government and agency bond issuances.

The Future of Equipment ABS: Certain Asset Classes

Aviation Assets

Aircraft or aircraft engine lease securitizations usually are a type of operating asset securitization which finance the cash flows from repeated short-term leases of long-lived assets, during a time period covering a reasonable portion of the remaining useful life of the assets. Because these operating asset securitizations involve leases that are not full payout contracts, the financings require ongoing re-leasing and other management by an experienced aviation equipment manager. And because of the uncertainty of how much cash flow will be squeezed from repeated leasing of the assets, ABS notes issued in an aircraft operating asset deal are sized so that they are expected to be repaid several years before the legal final maturity of the Equipment ABS. If the anticipated cash flows do not materialize, or the periodic appraisals of the aviation assets reveal that their value has declined more than anticipated, then the financial triggers in the documents will allocate all cash flows to amortization of the ABS notes until an acceptable loan to value ratio has been restored.

In its May 19, 2015 "Global Rating Criteria for Aircraft Operating Lease ABS", Fitch Ratings identified these "Key Rating Drivers": Aviation Market Cyclicality; Asset Value and Lease Rate Volatility; Releasing Risk and Servicer Reliance; and Lessee Credit Risk. The following paragraphs describe a number of unique risks, both credit and asset based, present in aviation securitizations. Rating agencies assess these unique risks and expect that the deal structure and documents will adequately mitigate these risks, whether through credit enhancements or otherwise.

<u>Concentration of Values</u>

The high cost of aircraft leads to similarly large lease payments, and thus sponsors typically pool substantially fewer leases for aviation securitizations than for other type of Equipment ABS. Fewer pooled leases means that delinquency or default for any one or two leases will have a noticeable impact on cash flow to investors. In fact, Standard & Poor's "Structured Finance: Aircraft Securitization Criteria" states that such defaults are the primary credit risk for aviation securitizations.

<u>Disconnect Between Useful Life of the Asset and the Lease Term</u>

Aviation assets typically have a useful life of twenty years or more. Most aviation ABS do not involve full-payout leases of that duration. The disconnect between the maturity of the Equipment ABS and the typical lease term puts investors at risk by exposing investors to periods of time in which the aircraft is grounded (i.e., not earning revenue) between leases, as well as related repossession and remarketing costs. Standard & Poor's Aircraft Securitization Criteria note that, in its cash flow simulations, such costs can range from $500,000 to $750,000 per plane.

<u>Grounded Aircraft</u>

Investors risk reduced cash flow whenever aircraft are grounded. As noted in the Standard & Poor's Aircraft Securitization Criteria, aircraft can be grounded not only in between lease terms, but also in situations where a lessee has temporarily defaulted or is negotiating a work out with the lessor, the initiation of a new lease has been delayed, its insurance has been cancelled, or the aircraft is undergoing work in anticipation of a new lease.

International Aspects

Aviation assets can travel far outside of the United States, thus exposing investors to country risk such as local rules regarding termination of a defaulted lease and foreclosure of the leased asset. One mitigant of this risk has been establishment of the International Registry of Mobile Assets ("IR").

The IR maintains an electronic filing system to establish perfection and priority of interests in aircraft and aircraft engines. IR operates under the legal framework of the Cape Town Convention and the Aircraft Protocol. IR maintains a "first to file" system that is applicable to ratifying countries, which currently include the United States, the rest of North America and all European countries. Although a number of countries have not ratified the Aircraft Protocol, the IR enables investors some measure of protection beyond that afforded by FAA filings for U.S. registered aircraft assets.

Increased Market Risks

While most securitized assets are tied to the health of the economy, Fitch Ratings' "Global Rating Criteria for Aircraft Operating Lease ABS" notes that this is especially true for the securitization of aviation assets. When the economy is depressed, typically there are increased lessee defaults, there are more aircraft available for lease/sale and the value of aviation assets falls. Lessee defaults are costly for investors because of the aforementioned concentration of values and the relatively high cost for the equipment manager to repossess and remarket the aircraft. Conversely, when the economy is booming and interest rates tend to rise, securitization offers a path to interest rates lower than would be charged in a one-off aircraft leveraged lease financing. KBRA notes that as "demand outpaces supply, … leasing of aircraft provides the most flexible and economical option for many airlines."

Expanded Role of the Manager

Managers for aircraft operating lease securitizations have expanded responsibilities. As Fitch Ratings Criteria have observed, Managers are tasked with more than simply billing and collecting rentals. They are expected to monitor maintenance of the aircraft and whatever filings or other measures are needed to protect aviation assets in applicable jurisdictions around the world. Furthermore, Managers are responsible for getting an aircraft that is off-lease, either because of lease expiration or lessee default, re-leased to another lessee, thus maintaining an income stream to the asset pool in an operating asset securitization.

Safety and Highjacking Risks

Aircraft from time to time face mechanical issues or operator errors that may result in damage or destruction of the aircraft, thus creating casualty or liability claims. In addition, aircraft also face highjacking and other risks, including terrorism threats, which may cause the aircraft to be grounded, destroyed or taken off-lease.

Lessee Credit

Investors face increased risk as the securitization term passes, as Fitch Ratings has commented, because as an aircraft ages, it is less likely to be leased by the kind of creditworthy air carrier that leased the plane when it was relatively new. Instead, they are typically leased by airlines that have weaker credit, including start-up airlines or airlines in lower-tier markets. On the other hand, KBRA in its January 2015 "Overview of the Aircraft Leasing Industry", observed that that "strategic mergers, cost rationalization, deleveraging and robust passenger traffic globally" are positives for the airline industry, and that "sustained lower fuel prices could also help lead to extension of leases for older aircraft—a credit positive for aircraft lessors operating in the mid-life market"; but that "carriers in some oil producing nations … are already under pressure which is a credit negative for lessors with exposure to those countries."

Maintenance Costs

Maintenance, whether scheduled or unscheduled, can be costly and leases need to adequately provide for the payment of these maintenance costs. Fitch Ratings' "Global Rating Criteria point out that the cash flow to investors can be interrupted by such costs as maintenance is required while an aircraft is off-lease.

Fuel Price Volatility and Technological Obsolescence

Even rising fuel costs may stimulate aircraft ABS. KBRA has observed that "overall demand for aircraft is further boosted by the need for the most fuel efficient 'replacement' aircraft both in emerging markets and more developed economies". Although noting "event risks such as wars, terrorist attacks, and pandemics, … shocks to aircraft demand have been short-lived".

Investors in aviation securitizations face many unique risks that are not present in securitizations of other assets. The rating agencies have established extensive ratings criteria for these securitizations in an effort to accurately assess creditworthiness and investor risk.

But all is not gloomy for Aviation ABS. At the 2015 SFIG Annual Convention, several panelists noted several positives: the growing market for helicopter finance; the expectation that today's global fleet is expected to double by 2035; and the arrival of new ABS issuers, some of which are financing relatively old aircraft, including two recent aircraft ABS transactions which financed commercial aircraft fleets with average lives of 14 years and 17 years.

Alternative Energy

In recent years, the world market has come to realize the implications of continuing to use non-renewable energy. Many commentators have emphasized the immediate need to transition to viable forms of renewable energy. It is believed that such a transition would lead to decreased dependence on other countries for energy, reduce pollution and the rate of global warming and decrease the costs of energy for consumers.

One form of sustainable clean energy that has gained widespread popularity during recent years is the use of solar energy. Solar energy is a form of clean energy harnessed through a special method called photovoltaics ("PV"). PV is used to convert energy from the sun into currents of electricity. Every country in the world, if the technology were available, is able to harness this solar energy.

Although there are several obvious advantages associated with solar energy, one of the main difficulties underlying the inability to transition to this form of clean energy is the high barriers to entry associated with the energy industry. However, in recent years, investors, the government and other sources of capital have become increasingly available as the world becomes more comfortable with this viable form of clean energy. SAPC ("Solar Access to Public Capital") and SEFA ("Solar Energy Finance Association") were established to develop procedures and standard form documents to address this need.

Residential and commercial capacity for PV is expected to grow at a 22% annual rate between the years of 2010 – 2020. [PricewaterhouseCoopers Report, p. 2]. This is an extremely rapid rate of growth for this industry. Additionally, certain cash grants issued by the US Government and tax credits are set to expire in 2016. These factors, combined with the already existing high barriers to entry, have led solar energy companies to turn to securitization for financing. Solar energy securitization has come about through two separate receivables-producing vehicles: (i) leasing and (ii) power purchase agreements ("PPA").

The securitization method of financing would greatly benefit the solar energy industry by increasing access to developers through lower financing costs and a diverse investor base. Investors may also find these investments to be advantageous because of the diversity of obligors within the underlying pool of assets, the relatively attractive returns (compared to U.S. Treasury bonds), and reduced insolvency risk through the use of an SPE to issue the ABS. The public at large would greatly benefit from the advent of solar energy securitization since it will lead to reduced energy prices, pollutants, and, perhaps, any global warming.

In November 2013, SolarCity, a California-based company became the first organization to issue securities backed by solar energy. SolarCity issued notes backed by solar energy receivables and technology that can be installed on rooftops. The ABS amounted to $54.23 million worth of notes with an interest rate of 4.8% per annum. SolarCity used both leases and PPAs as the underlying contracts. Standard & Poor's rated the 2013 notes at BBB+.

Standard & Poor's has stated that there are several hurdles facing Solar ABS. For one, since the solar industry is very new, it is difficult to predict the default rates that can be expected. Additionally, unlike other equipment leases and loans, a solar energy contract may last up to twenty years. Given the lengthy maturity, it may be difficult to discern how the lease and PPA obligors will perform, and whether the solar panels will continue to function, over such durations. However, Standard & Poor's has also noted that unlike other investment vehicles, the strong public policy concerns tied to the use of solar energy may hold down the default rates. In other words, Solar ABS may continue to perform for reasons beyond the traditional economic motivations.

Since 2013, SolarCity has issued three other Solar ABS. The recent Series 2014-1 issuance via SolarCity LMC Series II LLC reveals certain key considerations Standard & Poor's used to arrive at its BBB+ rating. The five key determinants were: (i) the degree of overcollateralization, (ii) the manager's operational and management abilities; (iii) the customer base's initial credit quality; (iv) projected cash flows; and (v) the transaction structure. The 2014-1 issue included an interest rate reserve that totaled six months' worth of interest payable on the notes. Additionally, the solar assets were very new: about one year old, on average. However, Standard & Poor's also highlighted certain weaknesses, such as the legislative uncertainty surrounding the tax benefits associated with owning solar assets. If Congress decides not to extend current tax benefits, the solar energy sector may experience difficulties in the future. Additionally, the long-term production of energy from solar technology is unpredictable. As such, cash flow originating from the production of energy can also vary. Lastly, there is a high concentration within the market with three states accounting for nearly 90% of the total portfolio.

Solar ABS is not the only avenue for alternative energy ABS: 1) Property Assessed Clean Energy ("PACE") allows solar projects to be paid for with loans that are then paid back through property tax bills over 10 to 20 years; 2) high-yield vehicles such as NRG Energy-sponsored NRG Yield Inc., which facilitates investment in a tax-advantaged structure; 3) the legislative possibility of making the master limited partnership structure available for clean energy assets; and 4) companies such as Honeywell International Inc. and Siemens Energy Inc. have installed energy conservation measures, created receivables under the related energy saving performance contracts, and then bundled them for syndication by intermediaries such as Bostonia Partners LLC.

The Future of Equipment ABS: SWOT Analysis

Strengths

For more than fifty years, equipment lease and loan finance has been characterized by an innovative, entrepreneurial spirit. Several elements factored in its early growth: the need for equipment users to obtain essentially 100% financing for expensive capital equipment; the desire of equipment users to obtain that financing without burdensome financial covenants which typically characterize both secured and unsecured credit facilities; the ability of many institutional lessors to utilize the tax benefits of equipment owned by them but leased to end users, with the latter reaping the benefits of that lessor tax benefit by being able to pay lower basic rent than if they had leased the equipment from a lessor which lacked the proverbial "tax appetite; and the willingness of lessors, regardless of whether they have "tax appetite", to take the risk of what the leased equipment will fetch, either by resale or re-lease, at the expiration of the lease term—and to offer the lessee correspondingly lower rent payments to the extent that the lessor is willing to assume that the equipment will fetch a greater residual value at lease expiration than other lessors might be willing to risk. Equipment finance began to accelerate in the early 1970s, marked by the publication of two articles: "Leveraged Lease Financing of Capital Equipment" (The Business Lawyer, November 1972) and "The Powerful Logic of the Leasing Boom" (Fortune magazine, November 1973).

In April 1985, the first two Equipment ABS transactions were closed, for originators Sperry and (nine days later) Comdisco. The latter transaction took five months to structure and issue $25 million of pay-through bonds to be issued, with Salomon Brothers as the placement agent. The structure was unremarkable (only a single class of bonds) and consumed extensive resources of time and money to structure, educate the rating agencies, and close. Seven years later, Comdisco issued more than $200 million of asset-backed bonds, again through Salomon Brothers as placement agent, but this time using a multi-class issuance of pay-through bonds with a shorter time frame and lower issuance costs.

Even before then, Equipment ABS had begun to illustrate the creativity which has characterized the equipment finance business. In October 1991, Advanta issued equipment contract-backed bonds whose tax structure featured a unique dual approach under which the bonds would be characterized as "true debt" (and hence advantageous to the issuer and investors) under either of two alternative tax scenarios. In December 1992, JWP issued a modest size issue of bonds for which the structure involved issuance of bonds which would be treated as "true debt" for federal income tax purposes and as a sale of the receivables for accounting purposes.

These transactions were particularly noteworthy, not only for their groundbreaking creativity, but also for their issuance during an economic malaise. Equipment ABS was not only demonstrating the ability to harness new structures, and to issue larger amounts of securities at lower transaction costs, but also showing how it could attract institutional investors during a troubled time for the economy generally.

Equipment ABS has demonstrated not only the ability to reduce transaction costs and achieve desired tax and accounting results, but also the skill at expanding into new asset classes. The early Equipment ABS issuances largely involved small- and middle-ticket office equipment. Starting in the mid 1990s, Equipment ABS expanded to include lease and loan receivables from titled motor vehicles, specialized medical equipment, agricultural and construction equipment, and aviation assets. More recently, several securitizations have involved receivables arising from commercial and residential solar energy equipment.

This innovation has not been confined to new kinds of equipment. Several Equipment ABS transactions have revealed that this financial technology can be used to finance the acquisition of a going concern equipment finance business (Lessor Capital Funding, 1993); to structure an exit strategy (a well-known, Chicago area company in 2009); and to combine tax-advantaged equity investment with asset-backed indebtedness (Interpool, 2002). The emergence of operating asset securitization in the mid 1990s, and its continued thriving for several classes of transport equipment, is another example of the strength and staying power of Equipment ABS.

Weaknesses

Equipment ABS enjoys many strengths but it also contains several weaknesses. (Warning: this section contains detailed legal concepts and terms.) For a lessor accustomed to budgeting not more than $10,000 for lender's outside counsel, and having inside counsel handle its own legal work, for a one-off lease financing, the array of expenses for a securitization can be daunting. Expenses for investor counsel typically start at $75,000, while legal fees for the sponsor (especially for the sponsor's first Equipment ABS deal) will be at least $125,000. And then there is the array of other transaction participants: the indenture trustee (and its counsel); the rating agencies (and their respective outside law firms); the organization (such as First Names and Lord SPV) which provides the independent director for the special purpose entity to which the sponsor will convey the contracts, receivables, and equipment and which will issue the ABS; the backup servicer (and its counsel) which is an essential element of an ABS transaction, in the event that the servicer (which frequently is the sponsor or an affiliate) of the assets must be replaced; and the accounting firm which (in recent SEC parlance) is the "third party due diligence provider" and expected to review a representative sample of contracts in the collateral pool and deliver its opinion that such review, using "agreed upon procedures", indicates that the statistics in the offering memorandum for the Equipment ABS overall collateral pool and the provider's recomputation of such statistics are "in agreement."

Additionally, the documents for a securitization are numerous and lengthy. A lessor accustomed to a 15-page loan and security agreement may be surprised at the following list of ABS transaction documents: 1) limited liability company operating agreement for the newly-established special purpose entity to which the sponsor will convey the contracts, receivables, and equipment and which will serve as the issuer of the Equipment ABS; 2) purchase and contribution agreement, under which the sponsor will convey those assets to the SPE, make several dozen representations and warranties regarding the contracts in the collateral pool, and agree to repurchase any assets subsequently discovered to be nonconforming; 3) servicing agreement, under which the sponsor (or an affiliate) and the backup servicer (on standby, in the event that it has to replace the servicer) agrees to handle billing and collection of the receivables, as well as enforcement of rights under the contracts and the equipment if the obligor defaults or becomes delinquent; 4) trust indenture, which provides for the terms of the multiple classes of Equipment ABS, the grant to the indenture trustee of a security interest in the collateral pool, the events of default and remedies, and (on each periodic payment date) the flow of funds (to the servicer, the trustee, the noteholders, and the issuer) collected by the servicer and the trustee during the prior collection period, from payment of the receivables, servicer advances for any delinquent receivables, sale of the equipment under defaulted contracts, and proceeds of any credit enhancement (such as a reserve fund or a financial guaranty insurance contract); and 5) a note purchase agreement, under which the ABS are sold to investment bank(s), if the ABS are being sold in a public offering or a Rule 144A transaction, or the institutional investors (if the ABS are sold in a traditional private placement.

Opinion letters are another aspect which both drive up the cost of issuing Equipment ABS and affect how the transaction can be structured. One essential step in any securitization is to isolate the assets from the bankruptcy estate of the lessor or other entity which sponsors the ABS transaction. This is accomplished by that entity selling the contracts, receivables, and equipment to the special purpose entity ("SPE") which will be the issuer of the Equipment ABS. The SPE typically is a wholly-owned subsidiary of the lessor or sponsor and hence the transfer of the assets is treated as both a sale and as a contribution to capital of the SPE.

In addition to the purchase and contribution agreement described above, investors and rating agencies, however, will insist that reputable outside counsel deliver a "true sale" opinion to the effect that: (a) in the event of the bankruptcy of the seller (the lessor or other sponsor), the transferred assets "would" not constitute "property of the estate" of the seller under Bankruptcy Code section 541; (b) the "automatic stay" under Bankruptcy Code section 362 "would" not prevent receipt of the sold receivables by the paying agent or trustee (as representative of the holders of the Equipment ABS); and (c) the sold contracts "could" not be rejected (as executory contracts) by the trustee in bankruptcy for the seller, or the seller as a debtor in possession (see the glossary for an explanation of these terms). The analysis required to reach such conclusions impels the lessor's counsel to be familiar with case law (starting with *Butner v. United States*, 440 U.S. 48 (1979)) and to structure the economics of the transfer from the lessor to SPE so that the risks and rewards of ownership of the sold assets have been transferred to the SPE and have not left the lessor with the ability to recapture any upside appreciation in the value of those assets—or with the liability for any loss in the event that the assets do not perform as anticipated.

Structuring a true sale can be tricky. For instance, in one transaction, the structure required the lessor to enter into interest rate swap agreements, to address the risk that the fixed rental payments under the equipment leases and loans might not cover the floating rate interest on certain classes of the Equipment ABS. The lessor decided to handle those arrangements, and the swap documents, in-house. Unfortunately, it overlooked the fact that the SPE should be the swap counterparty and accepted swap documents (prepared by the investment bank acting as initial purchaser of the Equipment ABS) which had the lessor as the swap counterparty and liable for any shortfall between the lease and loan receivables and payments required under the Equipment ABS. Furthermore, there was no cap on the lessor's liability under the swap documents. When added to other elements of limited lessor recourse under the ABS documents, the result was an unacceptably high level of seller liability and inconsistent with true sale analysis. Fortunately, lessor's outside counsel was alerted to the situation and the swap documents were rewritten so that the SPE was the counterparty and hence did not compromise the true sale of the assets.

It also is important to document the purchase and contribution agreement, between lessor and SPE, so that the parties will have ample provisions to cite in the event that a disgruntled creditor of the lessor (should it become bankrupt) attempts to challenge the "true sale" as merely a disguised financing collateralized by the purportedly sold assets. Some examples of helpful documentary provisions are: 1) a clear statement of the parties' intention that the transfer constitute a true sale; 2) writing the seller representations and warranties regarding the sold assets so that they do not constitute a warranty of collectability of the receivables; 3) filing UCC financing statements against the lessor, to evidence the sale of the assets and to perfect the security interest of the SPE in the leases, loans, and receivables; 4) a provision that the lessor has no right to repurchase the sold assets, except in the event of a breach of representation or warranty and demand by the SPE that the seller repurchase the defective assets; 5) a disclaimer of seller liability in the event that the obligor under any contract is delinquent or defaults; 6) a statement that the SPE has the unfettered right to sell, pledge or otherwise transfer the sold assets; 7) a requirement for immediate payment of the cash portion of the purchase price for the assets, without any SPE indebtedness being provided to the lessor-seller; and 8) the requirement that both parties covenant that all financial statements shall disclose the effects of the purchase and contribution agreement as a sale or capital contribution of the sold assets to the SPE.

Another essential element of a successful Equipment ABS is to establish separateness between the sponsoring lessor and the SPE. This is not necessarily easy, because the SPE will be newly-created, with officers and directors mostly taken from the parent company's major employees, with no separate real estate and only nominal capital. The lessor must be sure to follow all of the customary elements of separateness, to enable its counsel to deliver the necessary "nonconsolidation" opinion. These include: 1) organizational documents which restrict the SPE to entering into only the ABS transaction and the documents needed therefor; 2) the SPE paying the lessor (or a lessor affiliate, or a third party) a fair market fee for servicing (i.e, billing, collecting, and enforcing payment of the receivables) the assets; 3) maintaining books and records separate from those of the other party; 4) causing financial statements to state that the SPE is a separate entity and that its creditors will be entitled to satisfaction of their claims from the SPE's assets; 5) that the SPE's officers will act in the best interests of the SPE and independently of the parent company; 6) that the SPE will not lend, guarantee, or otherwise invest with any third party and will not hold itself out as responsible for any debts of the parent company; 7) that the SPE will not amend its organizational documents (which also will contain provisions regarding separateness and its limited, special purpose nature); 8) the SPE at all times has had and will have adequate capital in light of its contemplated business operations; and 9) the SPE at all times will have an independent director, member or manager (depending on the organizational form of the SPE).

Investors and rating agencies also will require other legal opinions but these are more conventional: (x) that the ABS documents entered into by the lessor and the SPE are legal, valid, binding and enforceable; (y) that the trustee or collateral agent for the ABS investors has a valid, first priority perfected security interest in the contracts and receivables; and (z) that the SPE is not an "investment company" for purposes of the Investment Company Act of 1940 (which was enacted to regulate mutual funds). The latter opinion can be challenging for law firms not versed in federal securities laws.

This recitation of legal opinions is designed to illustrate several facts: 1) that the legal fees for sponsor and SPE work encompasses more than preparing the purchase and contribution agreement, indenture (under which the ABS notes are issued and collateralized), servicing agreement (for billing, collecting, and enforcing the receivables), and note purchase agreement; 2) that it is very challenging for outside counsel which is attempting to handle a securitization without having done so on any prior transactions; and 3) that the opinion-sensitive nature of Equipment ABS drives the cost upward for representing the lessor and SPE. Equipment ABS is not for lessors lacking in either patience or the appetite to pay for substantial front-end costs.

Opportunities

On a more positive note, there exist in 2015 several opportunity areas for Equipment ABS. Perhaps the most exciting of these is electronic chattel paper ("ECP"), which has been the subject of a Foundation study earlier in 2015: "Digital Documents: Financing Paperless Transactions" and an article in the Spring 2015 issue of the Journal of Equipment Lease Financing. ("Chattel paper" refers to either a lease or a security agreement for specific items of equipment; a security interest in electronic chattel paper can be perfected by filing a financing statement, by possession of tangible chattel paper, or by control of ECP.)

Although many lessors, lenders and ABS investors continue to prefer chattel paper in hard copy, ECP has the potential to facilitate Equipment ABS in several ways. First, ownership of, and control over, electronic documents can be accomplished more readily through an electronic vault (established by a company such as eOriginal) than through delivery of tangible chattel paper. The latter requires physical transmission of documents from the lessor to a custodian (almost always in a different city), with the attendant risk of lost or misplaced documents in the contract file. It also necessitates a check-in process: by the document custodian, which must complete a checklist certifying possession of identified documents in the contract file; and sometimes by the financial institution (or its agent) which is providing or arranging financing of the contracts. With ECP and a trusted eVault, the expense of physical delivery and multiple check-ins are avoided. Second, the process for substituting or releasing contracts is streamlined. A few keystrokes, and the customary servicer certificate, are all that will be needed to release the perfected security interest of the ABS investors in the contract. DBRS spotlighted this opportunity in its May 11, 2015 weekly alert "Use of E-Contracts in Asset-Backed Securitization", noting that e-contracting can reduce fraud risk and improve access to real-time information on contract modifications.

New asset classes comprise another opportunity area for Equipment ABS. One of these, alternative energy, was described at length beginning at page 28. Domestic shale oil and gas production equipment has been identified by one rating agency as a developing area (albeit with more concentrated pools backed by larger ticket equipment). But there are others. Software has been growing in importance as equipment users demand bundled solutions from traditional providers of equipment. Software lease and license agreements both involve a scheduled cash flow, with many such arrangements created using a two-document structure: a software license agreement under which a recognized provider such as Oracle furnishes the software and warrants its performance; and an installment payment agreement ("IPA") under which the software licensee agrees, typically on a hell of high water basis, to make periodic, scheduled payments to the licensor or its assignee, such as a trustee or paying agent for investor(s). Recently, limited portions of software receivables have been permitted within the pool of financed contracts in Equipment ABS. Many observers are predicting that this proportion will grow and that eventually an entire ABS collateral pool will consist of software IPA receivables. One rating agency believes that future ABS may even include equipment service fees as ABS collateral.

Leases for security alarms and backup data centers constitute another opportunity asset class for Equipment ABS. Comdisco Data Recovery Services was one of the first movers in the backup data center industry. It offered customers the option to lease equipment, not located at any of the lessee's sites but at a secure Comdisco location. In the event of a local catastrophe, the customer would have access not only to the Comdisco backup equipment but also to data from its own site, which data would have been backed up periodically. The value of such a backup system became obvious after events such as the Chicago River flooded office building basements (which contained many mainframe computer systems for large corporations) or 9/11 and Superstorm Sandy in New York City.

Security alarms offer another opportunity for Equipment ABS. As the value of residential personal property increases, more homeowners have been installing modest sized, reasonably priced, home security systems linked to a central dispatch office which can alert the local fire department, police, or absent homeowner if the local system detects a fire, intrusion, or loss of heat during a winter cold snap. At first glance, receivables arising from such residential alarm system contracts would not appear to be a fruitful avenue for Equipment ABS: the contracts typically run for only one year, produce annual revenue of approximately $125 per location, and seemingly are subject to performance risk of the system. However, the relatively low annual cost for these systems results in a high renewal rate, thereby fulfilling one criterion for operating asset securitization. Additionally, the reliable performance of the systems not only leads to the high renewal rate, but also implies that equipment removed from the premises of a nonrenewing customer readily can be repurposed at the premises of a new customer. Security alarm systems and receivables appear to be an emerging candidate for operating asset securitization, provided that the systems are billed, collected and serviced by competent managers and the equipment is manufactured by a reputable producer. Recently published reports have suggested that "Home-security giant ADT is considering securitization as a funding source."

Threats

Equipment ABS has survived and thrived for the past 30 years notwithstanding several unforeseen shocks to the financial world generally: the S&L crisis of 1989-91; the dot-com bubble of 2000; the post-9/11 recession; and the Great Recession of 2008-9. Following the latter episode, one commentator observed that Equipment ABS survived and thrived, in part because "no one ever bought a fork lift truck for 10% down, expecting to flip it within six months for a 50% profit." Equipment finance also prospered because, unlike "Sunbelt condos bought on spec", leased equipment typically is an essential element of the lessee's revenue-producing business.

Nevertheless, Equipment ABS faces some threats which could have substantial adverse consequences: the Dodd-Frank Wall Street Reform and Investor Protection Act; so-called reform of the Bankruptcy Code; and any combination of inflation and rising interest rates (to the extent that interest rates on ABS notes were to rise faster than lessors could pass through to lessees as increased rentals). An ELFA member company, responding to a confidential questionnaire, observed that "transaction costs (legal, underwriting, rating agency, etc.) …are starting to materially impact overall cost of funds."

Dodd-Frank contains at least four potentially pernicious provisions: random assignment of rating agencies for ABS; disclosure for an issuer's methodology for calculating compliance with risk retention requirements; asset-level disclosure of data for each contract in the securitized collateral pool; and Equal Credit Opportunity Act (ECOA) data gathering.

<u>Ratings Roulette</u>. Dodd-Frank section 939F (the "Franken Amendment") mandates that the Securities and Exchange Commission promulgate rules requiring random assignment of rating agencies to provide the "initial" rating for any mortgage-backed or ABS issue. Another rating agency would be permitted to provide a rating for the same issue, so long as the assigned agency actually delivered a rating for the ABS

issue. The statute provides that the assigned agency would have to have been identified by the SEC as qualified to rate an ABS issue for that asset class, and that the assigned agency could only charge what the SEC determined was a "reasonable" amount for its rating service. The law permits the SEC to avoid random selection, but only if it declared that another system would be superior for protection of ABS and MBS investors than the statutory scheme.

Nevertheless, if the Franken Amendment were implemented as written, it could have disastrous consequences for Equipment ABS. For one thing, there can be no assurance that an agency deemed knowledgeable by the SEC actually would be as capable of evaluating the many aspects of an Equipment ABS deal as those which currently predominate (see "What is Securitization", supra). For another, any such assigned agency would be under no perceived obligation to act reasonably—as any nonassigned agency normally would act reasonably, knowing that its future business depended on its acting in accordance with market standards. For example, even if a sponsor had an experienced rating agency lined up to provide the "real" rating for an Equipment ABS offering, that other agency would be precluded from doing so unless and until the assigned agency had issued its rating. But the assigned agency could be adamant that its rating would be issued only if sponsor's outside counsel delivered an opinion regarding, for instance, treatment of the transaction under a provision of the Bankruptcy Code—an opinion which might never have been given by any other law firm and perhaps might not even be legally correct (this latter scenario occurred in a 2014 transaction, in which a rating agency requested an opinion relating to a motor vehicle titling trust which opinion would have been untrue as a matter of law).

Risk Retention. Thanks to Equipment ABS industry advocacy, the final Dodd-Frank risk retention regulations did not contain some of the more invasive provisions which had appeared in proposed regulations. But the final Regulation RR, to be effective for Equipment ABS issued on or after December 24, 2016, did require that sponsors disclose the methodology by which they calculated how their transaction complied with the requirements of Regulation RR. It remains to be seen how sponsors will comply with this requirement without revealing to competitors how their business metrics are determined. One clue may be discerned from mortgage backed securities issues, for which this mandatory methodology disclosure arises for mortgage-back securities ("MBS") issued on or after December 24, 2015.

Asset-level Disclosure. A third dilemma under Dodd-Frank pertains to the possibility that the SEC will impose asset-level disclosure on sponsors of Equipment ABS. Industry trade associations have protested that this disclosure could enable competitors to identify proprietary trade metrics of the originator or clients of the sponsor, or to violate the privacy of those obligors. Such a requirement also would result in higher compliance costs, as sponsors endeavored to include asset-level data for each loan or lease in the collateral pool, without violating any of the foregoing competitive and privacy issues. One individual, surveyed for this Report, commented that "if loan-level disclosure is required by the SEC for Equipment ABS, it will cause a major disruption to the sector due to competitive issues with releasing confidential marketing data."

ECOA. Industry professionals also have expressed concern over the implications of July 2015 letters, from several Democratic members of the US House of Representatives and Senate, urging the Consumer Financial Protection Bureau to issue implementing regulations under the Equal Credit Opportunity Act ("ECOA") "to require financial institutions to collect and publicly report certain loan and personal characteristic data on credit applications for women-owned, minority-owned, and small businesses." The House letter also appealed to the Federal Reserve Board to "enforce the data collection and publicly reporting requirements under [Dodd-Frank] section 1071 for motor vehicle dealers".

Industry concern arises not from any sense that equipment lessors and lenders may be vulnerable to any claims of discrimination, but rather from the need to protect the privacy of applicants and the legal uncertainty which would arise from the conflict between ECOA and other federal law provisions which prohibit creditors from inquiring "about the race, color, religion, national origin, or sex" of an applicant during the credit process. Present law already insulates the credit process from the potential for perceived or real discrimination. Implementation of ECOA may motivate some lessors and lenders to discontinue providing some financing options to their customer base, potentially limiting the availability of leasing or loans to small businesses. If this were to occur, then section 1071 would have reduced the availability of credit to small businesses.

The potential impact on Equipment ABS is more difficult to predict. Certainly, any reduction of lease or loan volume to small businesses would reduce the volume of small ticket equipment finance contracts to be securitized. Perhaps the wider fear is that the compliance implications of ECOA could implicate investors in Equipment ABS where the underlying contracts are subject to ECOA, and thereby reduce the pool of investors in Equipment ABS, resulting in a higher cost of funds to auto finance companies using securitization as a funding source.

Bankruptcy law constitutes another threat to Equipment ABS. As previously described under "What is Securitization", these transactions are structured to take advantage of Bankruptcy Code rules which have existed since the Code was last amended, effective in 1979. But in December 2014, the report of a commission appointed by the American Bankruptcy Institute recommended, among other things, that "adequate protection" for secured creditors (such as equipment lenders) be calculated using foreclosure value, instead of the more realistic replacement value for the equipment. One commentator has declared that "this recommended change, if enacted, is likely to cost secured creditors a bundle." If adopted by Congress and the President, this recommendation likely would have the effect of making secured loans less secure and would have a chilling effect on Equipment ABS where a substantial portion of the collateral pool consisted of secured loans.

Inflation and rising interest rates have been identified by some observers as a threat to Equipment ABS. Perhaps this fear arises from the fact that the American economy has witnessed a significant, secular decline in long term interest rates since 1982. But on closer inspection, this risk is not expected to constitute a major threat to Equipment ABS. For instance, when interest rates rose during 1994, there was no discernable downturn in Equipment ABS issuance. For another, any inflationary impact would have the effect of increasing nominal residual values of the leased or pledged equipment, thereby making the related leases and loans more secure. For the time being, KBRA in early 2015 forecast that the dollar yield curve is likely to flatten, thereby reducing the immediate impact of any Federal Reserve Board bump in short term interest rates.

A more realistic threat could arise from the assumption that the exceptionally good collateral performance of recent years will persist. If obligor performance were to falter, it could endanger specialty finance lessors which may be challenged to maintain their current operational quality and default/delinquency performance. One rating agency has mused that structural protections (such as trapping excess cash) may be needed to address any deterioration in underwriting standards or equipment recoveries under defaulted contracts.

Conclusion

Equipment ABS issuance has surged since the ELFF 2011 Study, fueled largely by diminishing loss and delinquency data and the resulting perception that Equipment ABS is one of the safer ABS asset classes. In its January 21, 2015 Newsletter, DBRS commented that in 2014 this sector “continued a trend of solid asset performance” and estimated that equipment leases/loans, marine containers, and energy efficiency/renewable energy issuance in 2015 would exceed 2014 volume. Although these transactions involve somewhat daunting costs, and threats are posed by possible regulations under the Dodd-Frank Act, those concerns appear to be outweighed by positives such as the emergence of new asset classes within Equipment ABS and the creative uses to which Equipment ABS can be applied. On balance, Equipment ABS appears to be poised to contribute to a renaissance for equipment finance.

Glossary

Automatic stay: Section 362 of the United States Bankruptcy Code provides that, at the moment a bankruptcy petition is filed, there is an automatic injunction that stops actions by creditors, with certain exceptions listed in Section 362(b), against property of a debtor who has declared bankruptcy.

Cape Town Convention on International Interests in Mobile Equipment or *Cape Town Treaty*: a treaty designed to facilitate secured financing and leasing of aviation equipment and other kinds of equipment for which a Protocol has been adopted.

Commercial Mortgage-Backed Securities or *CMBS*: Securities that are primarily secured by, or represent an interest in, a pool of commercial mortgage loans.

Consolidation: the ability of a court to order the consolidation of affiliated entities during bankruptcy proceedings, such that the assets and liabilities of the consolidated entities are combined and intercompany indebtedness is disregarded.

Hell or High Water Obligations: Obligations that continue regardless of any abatement, defense, or counterclaim which the obligor may possess, such as difficulties with the operation of the leased equipment.

Monoline or *Monoline Insurer*: An insurance company that insures payments on securities. Typically, a monoline insurer is rated AAA by at least two rating agencies and will issue an insurance policy that insures the timely payment of interest on each distribution date, and the ultimate payment of principal, on a final distribution date.

Mortgage-Back Securities or MBS: Commercial Mortgage-Backed Securities or Residential Mortgage-Backed Securities.

Qualified Institutional Buyer: Under SEC Rule 501 of Regulation D and Rule 144A, a corporate entity that owns and invests at least $100 million in securities of issuers that are not affiliated with such corporate entity.

Regulation RR: A rule issued jointly by six federal agencies, including the Securities and Exchange Commission and the Board of Governors of the Federal Reserve Board, to implement the credit risk retention requirements of Section 15G of the Securities Exchange Act of 1934 (as added by section 941 of Dodd-Frank), which Section 15G generally requires that issuers of asset-backed securities to retain not less than 5% of the credit risk of the assets collateralizing such securities.

Residential Mortgage-Backed Securities or *RMBS*: Securities that are primarily secured by, or represent an interest in, a pool of residential debt, such as mortgages and home-equity loans.

Rule 144A Offering: Rule 144A provides an exemption from the registration requirements of the Securities Act of 1933 for certain private resales to Qualified Institutional Buyers (QIB).

Unidroit or the *International Institute for the Unification of Private Law:* an international organization whose goal is to harmonize private commercial laws around the world through the formulation of uniform laws, principles and rules.

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