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## **Moodys Structured Finance Special Report on Alternative Financial Ratios for the Effects of Securitization**

Thomas E. Foley

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## **Alternative Financial Ratios for the Effects of Securitization: Tools for Analysis**

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**OPINION**

Effective leverage and adjusted EBITDA are useful but imperfect measures of the risk faced by finance companies which are active securitizers. In order to formulate an accurate and insightful profile from which to draw credit conclusions, it is vitally important to review additional credit quality factors. Outlined below is an alternative analytical framework for addressing the credit-worthiness of active securitizers accompanied by our assessment of the additional factors that play into their overall financial stability.

- Gain on sale accounting for companies that securitize a sizable portion of their assets can, in some instances, result in significantly higher reported earnings and equity as compared to balance sheet lenders – without, in many cases, materially changing the underlying economics or credit risk to the originator of the assets.
- The extent of risk transference is dependent on the structure of a particular securitization, and tends to vary among different asset classes. Moody's has found that, in general, risk transference is limited for many securitizations of credit card, home equity, auto, and certain other consumer loans.



- Moody's has developed a number of measures – including effective leverage, adjusted EBITDA coverage, and other ratios – that adjust reported earnings, debt and equity to isolate the impact of gain on sale accounting for securitizations that do not involve significant risk transference. These measures can be useful tools in broadening the understanding of financial flexibility for certain active securitizers.
- This study focuses in particular, on non-captive consumer finance companies. We have excluded captives due to the materially different analytical approach used to rate companies which derive significant benefits from their parent company relationships.
- The ratings opinions for active securitizers already incorporate the adjusted ratios discussed in this comment. There are no immediate ratings implications for these companies.
- Moody's ratings for securitizers continue to incorporate numerous factors related to franchise, management, interest-rate risk, and predictability of earnings, that are not easily captured by quantitative ratio analysis. These rating factors in several cases mitigate adjusted financial ratios that otherwise could be of significant concern.

## **INTRODUCTION AND BACKGROUND**

In earlier comments, Moody's has detailed how securitization can improve liability management by diversifying funding, enhancing alternative liquidity, and by match-funding assets and liabilities.<sup>1</sup> Moody's has also stated that securitization can fundamentally alter the business risks in a particular market. For example, as an asset class becomes more mature and is increasingly funded by securitization, there tends to be commoditization of the underlying asset, compressing margins and forcing specialization in areas of competitive advantage. Under this framework, portfolio lenders may ultimately find themselves with an uncompetitive business model if they do not manage their operating structures and business strategies in a manner reflective of a maturing, securitized market. Unless sustained competitive advantages are developed, these pressures will ultimately lead to higher leverage as companies seek to maintain returns on capital.

These trends are becoming evident in certain asset classes today, such as subprime auto, subprime home equity, and credit cards. For example, home equity lending had once been the domain of portfolio lenders such as The Associates, Beneficial Corp., and Commercial Credit. More recently, substantial market share has been captured by The Money Store, United Companies, and several newer entrants that have relied heavily on securitization to fund portfolio growth. The growth of these companies in a relatively short period of time has been impressive, as has their reported earnings and share performance. From a comparative standpoint, though, significantly different accounting practices for securitizers as compared to portfolio lenders has, in Moody's view, clouded the analysis of these differing business models.

This is a concern because the simple act of securitizing assets can affect the appearance of the income statement and balance sheet in a profound manner without, in many cases, significantly altering the underlying economics of the securitizer. Under gain on sale accounting, income statements reflect the present-value of lifetime earnings from assets in a single quarter, predicated on numerous assumptions and calculations. Reported earnings may give a false sense of the long term ability of the company to repay debt. Reported balance sheet leverage declines as securitized assets are treated as "sold" for accounting purposes, although there may be little, if any, risk transference (described further below).

*With the explosion in the use of securitization, it has become increasingly necessary to be able to objectively distinguish between the accounting effect and the economic impact of securitization. Because of different accounting treatment, any direct comparison of results with financial services companies that do not securitize their assets becomes misleading.*

<sup>1</sup> *Securitization and its Effect on the Credit Strength of Financial Services Companies*, Special Comment, November 1996.

This comment provides an alternative framework, including a series of measures and ratios, that can be useful – together with more traditional measures – in analyzing the financial condition of active securitizers, determining the relative performance and financial strength of such companies as compared to portfolio lenders, as well as in assessing comparative bondholder protection.

### **LIMITED RISK TRANSFERENCE**

The limited risk transference that occurs in many securitizations is important in understanding Moody's quantitative analysis for active securitizers. For certain asset classes, the structural features of securitizations, which typically require sponsor credit enhancement well in excess of expected losses, indicate that securitization has little – if any – risk transference.

As a starting point, many asset-backed structures (including home-equity, subprime auto, and credit cards) result in an issuer directly or indirectly retaining the first loss position of the securitized assets. A first loss position can be retained in a number of forms, including the retention of a subordinated interest; over-collateralization; initial funding of a reserve account to protect senior and subordinated investors; or a claim on excess spread.<sup>2</sup> In many cases, this first loss credit exposure leaves the securitizer responsible for a multiple of expected losses. Due to its first-loss position, the sponsoring company will absorb all credit losses up to the point where the credit enhancement it has provided is exhausted.

Additionally, a securitization that begins to approach or breach structured triggers could face the prospect of a ratings action or early amortization. Companies heavily reliant on the securitization market are strongly motivated to avoid even the threat of such an event which, at a minimum, would likely increase the cost of accessing this market or, more seriously, limit future access. As detailed in Moody's research, many securitizers have voluntarily provided additional support to preserve the integrity and ratings of their structured transactions.<sup>3</sup> In addition to more visible actions taken to support troubled securitizations, Moody's believes that a sizable number of other issuers are either currently supporting their securitizations, or are planning to do so in the near future, to ensure performance consistent with market expectations. Issuers can accomplish this in many ways by, for example, contributing cash, buying delinquent loans out of trusts (at par), substituting performing loans for delinquent loans, or foregoing fees. Many structured transactions allow fairly liberal substitution or repurchase of collateral.

However, it must be recognized that there is at least minimal transference of credit risk from the securitizer to the trust. In the event of catastrophic asset quality problems, all of the credit enhancement may be exhausted. Not having any legal responsibility to do so, the securitizer may choose not to support such a troubled deal. In this case, the asset-backed bond investors, and any third-party credit enhancers, such as a surety bond provider, would absorb the residual losses. By contrast, a portfolio lender would have to absorb all losses. If the joint probability of catastrophic losses and the decision not to voluntarily support a deal is sufficiently low, Moody's believes it is appropriate to adjust leverage calculations to reflect the minimal credit risk transference associated with those particular securitizations.

*Even without voluntary support, securitizers may retain the risk of credit losses under all but catastrophic loss scenarios.*

The financial prospects for a finance company that is unable to muster the resources to voluntarily support a securitization are indeed dire. Such a company would likely no longer receive any excess spread from the securitization trusts and might have difficulty raising external cash due to uncertainty over the asset quality of its serviced portfolio. In addition to its value in making comparisons across companies, the effective leverage ratio provides a measure of the magnitude of potential asset quality problems relative to a company's resources.

<sup>2</sup> *Can Asset Securitization Squeeze Any Juice Out of Your Capital Structure?* Special Comment, October 20, 1995.

<sup>3</sup> *The Costs and Benefits of Supporting "Troubled" Asset-Backed Securities: Has the Balance Shifted?*, Special Comment, January 1997.

Securitization does provide a significant benefit to the issuing entity in the form of a near perfect interest rate hedge for the loan pool, with the notable exception of the retained interests. Since asset cash flows are passed through to the creditors of the trust, the trust's assets are exactly match-funded. Although the cost of funding is locked in through securitization, the securitizer does face interest rate risk on any retained interests (excess servicing receivable and servicing rights) as cashflows to these assets will be affected by prepayments. This risk is not transferred away due to securitization.

## **FINANCIAL LEVERAGE**

Our research has often stated that leverage for certain companies was considerably higher than suggested by traditional measures of financial leverage. However, the quantification and detail underlying this statement was more limited.

*This comment provides an alternative quantitative approach to measuring the impact of securitization on an entity's financial condition. The data and ratios used in this analytical framework will be included in Moody's quarterly Finance Company Credit Opinions, as well as Moody's fundamental research on active securitizers.*

Moody's has in the past referred to "effective leverage," a conceptual framework under which a company's leverage is adjusted to reflect the underlying economics of its financial risk. The effective leverage computation and the adjusted EBITDA ratio are discussed in particular detail below because an understanding of the rationale underlying these ratios allows other measures that will be published by Moody's to be more easily understood. All of the restated ratios that will be reported for these companies are defined in the attached Appendix.

*Analytical Use of Effective Leverage.* The effective leverage ratio and other ratios discussed below are intended to capture the impact of gain on sale accounting in order to present securitizers on a more directly comparable basis to other financial services firms. An alternative approach, for example, would be to recast unsecuritized assets of commercial banks and finance companies under FAS 125 (Accounting for Transfers and Servicing of Financial Assets and Extinguishment of Liabilities), by recording all income and expense expected to be earned over the life of any loan at the time the loan is originated.

Because of the normal uncertainties surrounding the ultimate collection of a loan or pool of loans, Moody's believes the prudent analytical approach is to recognize income as it is earned. This does not suggest that net interest income (the balance sheet equivalent of excess spread) yet to be received has no value. Indeed the predictability of the future cash flows from the loan book is a key consideration in rating any financial institution. Similarly, residual interests or excess servicing receivable (ESR) cash flows have value, and different probabilities of receipt for different companies and securitizations. Nevertheless, Moody's believes that effective leverage presents a valid and useful analytic framework for considering the underlying financial strength of these companies.

*In re-accounting for securitizations, we are not saying that the ESR has no value – any claim on cash flow has value. Rather, we are restating leverage ratios so that active securitizers, and the finance industry in general, can be analyzed on a more comparable basis.*

## ACTIVE SECURITIZERS

The ratios we use to analyze active securitizers are presented in this comment for a group of independent consumer finance companies which securitize the majority of their loan originations. The reliance of these companies on securitization for funding is evident in the *Table 1*.

For purposes of comparison, *Table 2* shows the funding mix for a group of non-captive consumer and diversified finance companies. This group relies less heavily, or not at all, on securitization as a source of funding.

Moody's believes that the analysis that is applied to active securitizers in this Comment is equally applicable to other finance companies that use securitization to a lesser extent, and intends to publish such adjusted ratios in the future. However, the more limited use of securitization, and gain accounting, means that leverage ratios for these companies will not diverge as markedly from traditional measures as is the case for more active securitizers.

	Senior Debt Rating	Sub'd Debt Rating	Percent of Funding from Securitization at 12/31/96
Ames Financial Corporation (a)	Ba3	B2	78.4
Advanta <sup>1,2</sup>	Baa3/Ba2	Ba1/Ba3	70.9
AmeriCredit Corp.	Ba2	—	61.0
Arcadia Financial, Ltd.	B2	B3	82.8
Capital One <sup>2</sup>	Baa3/Ba1	Ba1/Ba2	56.7
Cityscape Financial Corp.	B2	B3	70.3
ContiFinancial Corporation	Ba1	—	78.7
Delta Financial	B1	—	80.0
FirstPlus Financial Group	—	B3	72.4
First USA <sup>2,3</sup>	Aa2/Aa3	Aa3/A1	62.8
Green Tree Financial	Baa1	Baa2	83.5
MBNA <sup>2</sup>	Baa1/Baa2	Baa2/Baa3	62.6
Mego Mortgage Corporation	—	Caa1	76.4
The Money Store	Ba1	(P)Ba2	82.4
United Companies Financial	Ba1	(P)Ba3	80.3

1 Ratings are under review, direction uncertain.  
2 Ratings are for bank/holding company  
3 Subsidiary of Bank One Corporation.

## EFFECTIVE LEVERAGE CALCULATION

The calculation for "effective leverage" restates debt and equity, so as to account for securitizations as the equivalent of secured borrowings. Effective leverage is the ratio of Adjusted Total Debt to Adjusted Common Equity.

In the following discussion we will show how each component of the ratio is calculated.

*Adjusted Total Debt*, the numerator for effective leverage, adds interests in securitization trusts which have been sold to investors to the securitizer's balance sheet debt. Moody's estimates the outstanding amount of bonds sold as the principal amount of total loans serviced for third parties, i.e. excluding loans on the balance sheet. Loans serviced for third parties where there is no recourse of any kind, other than the responsibility as servicer, should also be excluded from this number. The

	Senior Debt Rating	Sub'd Debt Rating	Percent of Funding from Securitization at 12/31/96
American General Finance Corporation	A2	A3	1.0
American Express Company	A1	—	2.0
Aristar, Inc.	A3	Baa1	0.0
Associates Corp. of North America	Aa3	A1	0.0
Avco Financial Services, Inc.	A2	A3	0.0
Beneficial Corporation	A2	—	11.5
Commercial Credit Company	A1	(P) A2	0.0
Household International	A3	—	38.5
Norwest Financial, Inc	Aa3	A1	0.0

resulting estimate of outstanding securitization debt should be fairly accurate, and can be added to balance sheet debt to calculate the numerator as –

$$\text{Adjusted Total Debt} = \text{Balance Sheet Debt} + \text{Securitization Debt}$$

**Adjusted Common Equity** is calculated by reversing gains from securitizations and adding back excess spread as income to common equity. Adjustments are also made for the different accounting methods firms would be subject to if they did not account for securitizations as sales. These include accounting for costs and fees associated with loan originations (FAS 91) as detailed in Exhibit 1, and the recognition of certain excess spread received by the trust (or REMIC) as income.

**Adjusted Common Equity** is defined by Moody's as reported common equity of the securitizer, less the sum of the ESR (also known as "interest-only strips and residual interests"), capitalized servicing rights, and goodwill; and plus adjustments for FAS 91 and, in certain cases, unrecognized income from restricted deposits. Except for the deduction of goodwill, these adjustments are made on an after-tax basis, recognizing that book equity is normally increased or decreased net of tax effects.

### **Preferred Stock as Equity**

Moody's will present the effective leverage calculation in two forms: against common equity and against total equity (including preferred). Common equity is a more conservative base, and is used to isolate the increasing tendency for financial services firms to include hybrid securities, such as Trust Preferred or convertible debt/preferred stock, in their capital structure. Common equity is practically and optically important for confidence-sensitive issuers for many reasons, not the least being that it absorbs operating losses. In contrast, while hybrid securities may have a junior creditor's claim or, in some instances, be subordinate to debtholders in liquidation (and therefore are incorporated in severity of loss assumptions for rating purposes), they are debt-like in their behavior for an ongoing operating entity and provide limited financial flexibility for confidence-sensitive issuers in a stress scenario.

### **Goodwill**

Goodwill is deducted from equity since it has uncertain value, particularly in liquidation, such that bondholder protection from these assets is questionable. The resulting calculation is –

Adjusted Common Equity =		Common Equity
	<i>Less</i>	Goodwill
		ESR (After tax or AT)
		Capitalized Servicing Rights (AT)
	<i>Plus</i>	Deferrable Items Under FAS 91 (AT)
		Unrecognized Excess Spread Income (AT)

The resulting ratio for effective leverage is similar to the traditional calculation –

$$\text{Effective Leverage} = \text{Adjusted Total Debt} / \text{Adjusted Common Equity}$$

Exhibit 1 provides further detail on the adjustments to the equity base.

## EXHIBIT 1

### **Navigating Effective Leverage Adjustments**

Moody's intention in formulating these revised ratios for securitizers is to provide objective measures that are useful analytical tools and can be re-created from public information. Close analysis of the companies that are the subject of this comment led to a number of adjustments intended to place them on a reasonably comparable basis with companies that securitize to a lesser extent. In some instances, adjustments are based on estimates or assumptions that Moody's believes to be reasonable and reflective of typical market practices.

#### **Adjusting for Gains**

Under gain accounting (FAS 125), common equity is increased to the extent of any gain on sale recorded from securitizations. The largest component of the gain recognized is the claim to future excess spread. This claim appears on balance sheets under a host of names, including "excess servicing receivable," "finance income receivable," "interest-only and residual certificates," "interest only strips," "trading securities," etc. We will refer to this asset as the "Excess Servicing Receivable" or "ESR." Other significant components of the gain recognized are capitalized servicing rights, if any, and unamortized premiums and discounts. Smaller items included in gain on sale are hedging gains and losses and legal, accounting, and underwriting fees. These smaller items do not have a material impact on the outcome of our analysis so they are ignored here.

One approach to restating equity to what it would be if gain accounting were not used would be to reverse each accounting entry affecting the ESR and capitalized servicing rights – a tedious and data intensive calculation. After further adjustments for FAS 91, etc., we would arrive at adjusted equity. In the case of the ESR and capitalized servicing rights, Moody's makes a far simpler adjustment by recognizing that the carrying values of the ESR and capitalized servicing assets is the accumulation of all of these accounting entries we would wish to reverse. Excess servicing spread actually received is accounted for as a reduction of the ESR or is recognized as income when received. By deducting the carrying value of the ESR, which represents gains less amortization, we reverse accounting gains but also add back a good proxy for spread income that would be earned by a balance sheet lender. The amount of excess spread recognized as income when received is not affected by this adjustment.

#### **Adjustment for FAS 91**

Under Financial Accounting Standard 91, Accounting for Non-refundable Fees and Costs Associated with Originating or Acquiring Loans and Initial Direct Costs of Leases, premiums, discounts, costs, and fees directly related to loan origination are deferred and amortized over the life of the loan. When the loan is sold, these deferred items are written off, either increasing or decreasing the gain on sale. In adjusting common equity for the effects of gain accounting, we reverse these items from equity. In making this adjustment we note that premiums arise principally from the acquisition of loans through wholesale channels by B & C mortgage lenders and by specialty auto finance companies through the acquisition of higher quality "sub-prime" or "non-prime" loans. Retail mortgage origination and most sub-prime auto finance involves acquiring loans at a discount. Other direct costs of retail loan acquisition could be capitalized by active securitizers if gain accounting were not used. These deferrable costs, however, are often offset almost equally by discount points and/or fees paid by the borrower. Unlike mortgage and auto loan lenders, to the extent that credit card issuers defer origination and/or solicitation costs under FAS 91, they do not write off the deferred items when receivables are securitized, so that no adjustment is needed.

In this comment, the FAS 91 adjustment, in all but one case, was made equally for all companies in proportion of their wholesale acquisitions on which premiums are paid, at a 4% rate. This will of course overstate or understate the adjustment for individual companies but is reasonably accurate overall. In one case (Green Tree) we added deferrable expenses back to equity as the company does not receive offsetting fees or discount points.



### **Adjustment for Restricted Cash**

The adjustment for the receipt of cash which has been deposited to restricted accounts and held by the trust as collateral for the securitization debt (or will be paid out to reduce senior certificates) depends on whether or not these receipts have been recognized as income by the securitizer. Two methods of income recognition are in use by securitizers. The more liberal method discounts excess spread cash flows from the time they are received regardless of whether or not they are released by the trust or held as restricted cash. Any receipt of excess spread is recorded as income and is offset by amortization of the ESR, with the net result being a reduction of the ESR and an increase in cash, either restricted or unrestricted. By contrast, the more conservative method of initially determining the ESR discounts these cash flows only from the time they are expected to be released by the trust. No accounting entries are posted when cash is deposited to restricted accounts. When cash is released by the trust, income and amortization expense are recorded.

The difference between these two methods is one of timing. Total cash received and recorded as income is the same in both cases. This timing difference is, however, relevant in that a balance sheet lender would recognize the receipt of such cash payments as net interest income regardless of whether the receipts were pledged as collateral for secured borrowings. In cases where these deposits are publicly disclosed, or where we feel we can make an informed judgment as to the amount and appropriateness of an adjustment, an equity adjustment is made. We have only adjusted common equity for these restricted deposits in two cases – ContiFinancial and the United Companies.

It should be noted that "restricted cash" on balance sheets often includes other types of restricted deposits which have no income impact, such as the up-front deposit required as initial reserve account funding. No adjustment is needed for these other deposits.

### **Other Possible Adjustments**

The analyst may wish to make additional adjustments to these calculations. As an example, Moody's has reversed the gain on sale net of reserves for credit losses that are embedded in the ESR. The result is that the equity base for the effective leverage calculation is increased by the credit loss reserve related to a securitization, effectively giving securitizers credit in their equity base for loss reserves, without requiring them to establish an appropriate loss reserve. Moody's equity base for these companies could therefore be seen as somewhat overstated, and the adjusted leverage ratios being understated. Analysts may desire an additional adjustment to "add back" an appropriate loan loss reserve, and accordingly reduce equity.

Additional modifications may be appropriate for particular issuers. For example, over-collateralization, which includes the excess of the balance of the securitized pool over the debt issued, is reflected in loans serviced but not in securitization debt. Adjusting for over-collateralization, or, alternatively, using the actual principal amount of debt issued by the trust instead of loans serviced for third parties, may be preferable but would require the use of information that may not be readily available. Similarly, certain issuers carry goodwill that has been designated as tax deductible – whereas the Moody's calculation does not tax adjust the goodwill deduction.

Further, certain entities have begun to sell all or a portion of their ESR asset (often termed "Net Interest Margin" or "NIM" certificates) which would favorably impact Moody's effective leverage calculation. However, it may be appropriate to adjust equity if, for example, the sale of a NIM certificate nevertheless leaves the securitizer with a meaningful first loss position. Moody's will continue to review these situations on a case-by-case basis, but at this point, our measure of effective leverage does not adjust for NIM sales.

These issues underscore the fact that any financial ratio has embedded limitations – users of this information are encouraged to make their own adjustments as they deem reasonable. Moody's believes that, although a greater level of precision would be possible given additional assumptions and/or the use of information not normally disclosed in public filings, the resulting ratios published in this comment do provide a useful alternative framework to the traditional financial ratios now widely applied to active securitizers.

## **ADJUSTED EBITDA COVERAGE**

The rapid growth of certain active securitizers has typically led to rapid growth in reported earnings. The extent to which these profits, which are primarily composed of gain on sale, will be realized as cash flow is a subject of increasing scrutiny as loan portfolios season, and certain issuers have had to restate the value of their retained interests. A useful measure in understanding the cash demands resulting from rapid growth of companies in this sector is reflected in the Adjusted EBITDA coverage ratio. Like its counterpart, effective leverage, this ratio restates a company's results as if securitizations were recorded as financings. Unlike effective leverage it is conceptually simpler and less subject to debate.

Credit analysts often express the ability of companies to pay, or "cover," interest expense from operating earnings. A popular measure is EBITDA coverage, which is the ratio of earnings before interest, taxes, depreciation, and amortization to interest expense. When this ratio is calculated for securitizers, however, it may give a false sense of security. The inclusion of gain on sale in the numerator of this ratio is inappropriate as gains cannot be used to pay interest expense. To adjust for this, we simply deduct any gain on sale from earnings when calculating EBITDA coverage. The result is adjusted EBITDA coverage.

Adjusted EBITDA coverage does give credit for excess spread actually received, as this is included in earnings as either servicing or interest income. It is important to note that, in our analysis, we do not restate company financials under the assumption that securitizers would fund their loan portfolios differently if they were not allowed to record gains from securitizations. One of our working assumptions is that active securitizers obtain the most economically beneficial funding available. (The relationship between funding choice and accounting standards is beyond the scope of this special comment.) Therefore, a restatement of accounting for these transactions as financings does not involve replacing excess spread received with its portfolio lender counterparts – interest income and interest expense.

Regardless of the reader's view on gain on sale accounting, it should be recognized that traditional interest coverage ratios may overstate a securitizer's ability to pay interest from operating earnings, whereas adjusted EBITDA coverage provides an accurate measure of coverage. However, as is the case with all ratios, this ratio is based on historical data. An analysis of the company's ability to pay interest must be forward looking and should take into account non-operating sources of cash such as access to capital markets, etc.

## **ADJUSTED RATIOS FOR SPECIALTY FINANCE COMPANIES**

The calculation of the effective leverage ratio through public financial information requires the analyst to make some estimates for the adjustments described above. Deductions for the ESR, capitalized servicing, and goodwill are fairly straightforward and are based on readily available public information. The following tables provide a "walk through" of the calculations, showing separate ratios before and after the FAS 91 and restricted cash adjustments.

**Effective Leverage  
March 31, 1997**

	<b>Without Adjustments<sup>1</sup></b>	<b>After FAS 91 Adjustment<sup>2</sup></b>	<b>Adjusted for Restricted Cash<sup>3</sup></b>
Aames Financial Corporation	43.3	26.9	26.9
Advanta Corp.	30.9	30.9	30.9
AmeriCredit Corp.	5.8	5.8	5.8
Arcadia Financial, Ltd.	31.8	18.5	18.5
Capital One Financial Corp.	16.8	16.8	16.8
Cityscape Financial Corp.	nm	nm	nm
ContiFinancial Corporation	83.5	34.6	21.7
Delta Financial	39.4	21.7	21.7
FirstPlus Financial Group	21.2	16.0	16.0
First USA, Inc.	26.8	26.8	26.8
Green Tree Financial	41.5	25.1	25.1
MBNA Corp.	29.7	29.7	29.7
Mego Mortgage Corporation	570.3	42.7	42.7
The Money Store	124.9	67.5	67.5
United Companies Financial	nm	nm	33.7

1 Excludes adjustments for FAS 91 or restricted cash

2 Excludes the restricted cash adjustment.

3 Includes the restricted cash adjustment for two companies where disclosure is sufficient.  
note: "nm" means not meaningful, i.e. adjusted equity is negative.

Obviously these adjustments can have a large impact on the effective leverage ratio. It is, therefore, important to carefully evaluate each adjustment.

The following table shows (1) Moody's effective leverage ratio; (2) leverage calculated under the traditional approach using unadjusted balance sheet information; and (3) adjusted EBITDA coverage for active securitizers rated by Moody's.

	<b>Moody's Effective Leverage at 3/31/97</b>	<b>Leverage (unadjusted) at 3/31/97</b>	<b>Adjusted EBITDA Coverage Qtr. to 3/31/97</b>
Aames Financial Corp.	26.9	1.3	-1.5
Advanta Corp.	30.9	4.2	.4
AmeriCredit Corp.	5.8	1.0	3.1
Arcadia Financial, Ltd.	18.5	1.2	-.6
Capital One Financial Corp.	16.8	5.4	2.0
Cityscape Financial Corp.	nm	2.9	-.6
ContiFinancial Corporation	21.7	1.4	.8
Delta Financial	21.7	1.1	-.5
FirstPlus Financial Group	16.0	3.5	-.1
First USA, Inc.	26.8	5.9	1.9
Green Tree Financial	25.1	.8	1.2
MBNA Corp.	29.7	3.2	1.5
Mego Mortgage Corporation	42.7	1.2	-2.7
The Money Store	67.5	2.8	1.4
United Companies Financial	33.7	1.5	2.5

note: "nm" means not meaningful, i.e. adjusted equity is negative.

Two observations are relevant:

- Effective leverage is very high for most active securitizers. A typical operating model for these companies has been to rapidly increase their loan production and servicing portfolios – often using wholesale originations – funding that growth with securitization.
- These companies often report impressive growth in GAAP earnings due largely to the gains recorded from these transactions. However, total cash flows from operations is typically negative due to the net cash outlays required for originating each loan and funding required reserves for securitizations.

The reader will, of course, realize that there is not a strong correlation between effective leverage, adjusted EBITDA ratios and credit ratings. As is true for any Moody's rating analysis, numerous factors are incorporated in the rating process. Several common rating considerations are enumerated in the following section.

### **OTHER RATING CONSIDERATIONS**

Moody's finance company ratings take into account numerous factors in addition to both traditional quantitative ratios and the adjusted ratios addressed in this comment. Other credit considerations, many of which involve judgmental decisions, are integral to Moody's rating process. Some of the many important factors considered for these companies include –

- strength and defensibility of franchise
- competitive environment
- predictability of earnings (cash flows)
- quality of assets
- funding strength and diversity
- operating policies and procedures
- use of technology
- management experience and capability

What might otherwise be considered weak quantitative measures can be offset or mitigated by strong franchise factors, and a high likelihood that expected earnings will be realized. Moreover, while high leverage and low interest coverage is a rating constraint for these entities, asset quality remains the overriding concern in this industry. It determines the liquidity of the finance company's basic product and therefore the willingness of lenders to the company and guarantors of its obligations to continue to finance production. For balance sheet lenders, credit quality directly affects the company's earnings spread by reducing interest revenue. For securitizers, the impact of changes in asset quality are magnified by gain on sale accounting, i.e. *GAAP equity may be subject to significant restatements if actual performance or prepayments on a securitized asset pool deviate from projected levels.*

### **CONCLUSION AND OUTLOOK**

Effective leverage and adjusted EBITDA are useful measures of the risk faced by firms which are active securitizers. But, these measures are not perfect, and they are not the end of the story. It is our hope that the reader is not led to believe that a few ratios can provide a sufficient analysis of a finance company on which to base an investment decision. As was stated above, it is vitally important to review other credit quality factors, asset quality being one of the more important ones. For these reasons, Moody's has considerably expanded the number of ratios that will be published on a quarterly basis for active securitizers. The attached Appendix details the underlying calculations for 22 ratios and data points that are useful in analyzing these companies. Separately, detailed research reports for these companies will provide extensive data supporting these calculations. Over time, these ratios will be presented for other finance companies which rely less heavily on securitization.

An as yet unanswered question is why certain active securitizers can operate with high effective leverage and little or no interest coverage. Part of the answer to this question is that leverage through securitization may be slightly more tolerable than balance sheet leverage due to the

transfer of catastrophic credit risk and the interest rate hedge provided by securitization. Also, the asset quality of the serviced portfolios of active securitizers is more transparent to investors than are the portfolios of balance sheet lenders. However, the primary reason active securitizers can continue to operate with high effective leverage and little or no interest coverage is that they are building the capability to generate sufficient cash flow to service balance sheet debt. As long as investors are comfortable with that process, these companies will continue to attract the capital needed. The extent of this sufficiency depends on asset quality. Should projections of loan losses prove to be overly optimistic, lower rated companies in this sector could be susceptible to liquidity constraints. If losses exceed pre-specified levels in securitization deals, excess spread can be trapped, further exacerbating already tight cash flow requirements.

Finance companies with virtually no unencumbered assets (keep in mind that the ESR is pledged against securitization debt) may find it difficult to attract external sources of funding when the quality of their assets is in question. It is for this reason that we believe the effective leverage ratio provides valuable insight. The numerator of the ratio, because it encompasses the portfolio serviced for others, directly reflects the magnitude of risk a company faces from a change in its asset quality. The denominator reflects the unencumbered assets of the company which may provide liquidity in the event of an asset quality problem.

It is also important to note that while these adjustments have the greatest impact on ratios for companies that are heavily reliant on gain on sale accounting, they may also be useful in analyzing other finance companies that securitize. Many of the finance companies in Moody's rated universe have thus far been fairly conservative in their use of gain on sale accounting, so that unadjusted equity to managed assets ratios fairly accurately reflect their leverage. Nevertheless, the implementation of FAS 125 may increase the gains recorded from securitization. Therefore, Moody's expects to further expand the universe of financial service companies for which these adjusted ratios are provided, on a routine basis.

## **APPENDIX – DEFINITIONS OF ADJUSTED FINANCE COMPANY STATISTICS**

**Adjusted Equity:** Common equity less the sum of the ESR, capitalized servicing rights, and goodwill; and plus unrecognized income from restricted deposits and an adjustment for the effects of FAS 91. All of these adjustments, except the adjustment for goodwill, are made on a tax adjusted basis by deducting taxes at the company's effective tax rate.

**Effective Leverage (common equity):** Adjusted Debt divided by Adjusted Equity, where Adjusted Debt is the sum of debt issued by special purpose securitization vehicles to third party investors, balance sheet debt, preferred stock, and minority interest, and Adjusted Equity is as defined above. After-tax items are calculated by deducting taxes at the company's effective tax rate.

**Effective Leverage (total equity):** Adjusted Debt divided by Adjusted Equity, where Adjusted Debt is the sum of debt issued by special purpose securitization vehicles, balance sheet debt, and minority interest, and Adjusted Equity is as defined above, however, with the inclusion of preferred stock as equity.

**Book Equity/Total Managed Receivables:** Common equity, as determined by GAAP, divided by the total serviced portfolio.

**Retained Interests to Securitized Receivables:** The ratio of retained interests in securitizations (whether an interest only or residual interest) to the total outstanding balance of securitized receivables.

**Retained Interests to Common Equity:** The ratio of retained interests in securitizations (whether an interest-only or residual interest), on an after-tax basis, to common equity as determined by GAAP.

**Adjusted EBITDA Coverage:** Earnings before interest, taxes, depreciation and amortization less gain on sale, divided by interest expense.

**Adjusted Pre-Tax Return on Managed Receivables:** Earnings before taxes less gain on sale and plus amortization of retained interests and capitalized servicing rights, divided by the average total servicing portfolio.

**Operating Expenses to Average Managed Receivables:** The ratio of annualized operating expenses to the average of the total serviced portfolio. Interest expense is excluded from operating expenses.

**Cash from Operations:** Total cash flows from operations as shown on the statements of cash flows.

**Cash from Operations net of Originations, Sales, and Repayments:** Total cash flows from operations as shown on the statements of cash flows, net of cash used for acquiring loans and cash received from loan sales and principal repayments. Cash used for acquiring loans and cash received from loan sales and principal repayments are netted out only when they appear in the cash flows from operations section of the statements of cash flows.

**Total Managed Receivables:** This is the same as "total serviced portfolio." It includes loans on the balance sheet as well as those serviced for third parties.

**Growth in Total Managed Receivables:** The annualized growth rate in the total serviced portfolio.

**Gains to Assets Securitized:** The ratio of gains on sales to assets securitized during the same period.

**Loans Originated and Purchased:** The total principal amount of loans originated or purchased for the period then ended.

**Gains on Sales to Total Revenues:** The ratio of gains on sales to total revenues for the period then ended.

**NCOs to Prior Year Total Managed Receivables:** For a fiscal year, the ratio of net charge-offs to the total serviced portfolio at the end of the prior fiscal year. For a quarter, the ratio of annualized

net charge-offs to the total serviced portfolio at the end of the comparable prior year's quarter.

*NCOs to Average Managed Receivables:* The ratio of annualized net charge-offs to average total serviced portfolio for the period.

*Owned NCOs to Balance Sheet Receivables:* The ratio of annualized net charge-offs, related to balance sheet receivables, to average total balance sheet receivables, net of unearned finance charges but without any deduction for loss reserves.

*NPAs to Prior Year Total Managed Receivables:* The ratio of loans 60 or more days contractually past due, loans in process of foreclosure, and repossessed and foreclosed collateral (all of the foregoing being referred to as "Non-Performing Assets") to the total serviced portfolio one year prior to the date of determination.

*NPAs to Total Managed Receivables:* The ratio of Non-Performing Assets to the total serviced portfolio one year prior to the date of determination.

*Reserves on Retained Interests to Securitized Receivables:* The ratio of estimated loan losses, used in the valuation of retained interests, to the total portfolio serviced for securitization trusts.





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