ASSET-BACKED SECURITIES

Asset-Backed Securities:
Do They Belong In Corporate Accounts?

EXECUTIVE SUMMARY:

Empirical data support the view that AAA-rated asset-backed securities provide comparable investment returns while incurring less credit risk and return volatility than AAA-rated corporate securities.

The annual return advantage of ABS was 5 basis points (bps) over corporate securities in the last six years. The return pickup shot up to 41 bps annualized when the credit market was in distress.

The sector offers about 20 times the number of AAA issuers than the corporate sector, and 10 times as much in market value, making it a better risk diversification candidate.

While historically less than 2% of AAA ABS issues face the risk of a downgrade in a five-year period, 30% of corporate AAA's lose their top ratings over the same period.

INTRODUCTION

Despite the established history and popularity of asset-backed securities (ABS) in fixed income portfolios, there exists a group of corporate treasurers who remain skeptical of the securities' legitimacy in corporate cash portfolios. This paper analyzes the relative risk and reward characteristics of ABS investments in relation to corporate bonds from the vantage point of a short-duration corporate cash manager. We also offer a highly condensed introduction to the security class and some practical considerations when using ABS in a cash portfolio.

Our empirical analysis reveals that, between 1998 and 2003, ABS, on average, had an annual return advantage of five basis points over AAA corporate bonds, with lower return volatility. We further demonstrate that the primary advantages of investing in ABS are that they are of higher credit quality, with more investment selections, diversity, and diversification.

For our analysis, we drew empirical data from the Merrill Lynch Asset-Backed Securities Master Index and the Merrill Lynch AAA-Rated 1-3 Year US Corporate Index to represent the respective asset classes. Both indices have a credit rating of AAA and approximately the same level of interest rate risk, which make performance comparisons meaningful[1].

Though some corporate cash portfolios are shorter than the represented ABS

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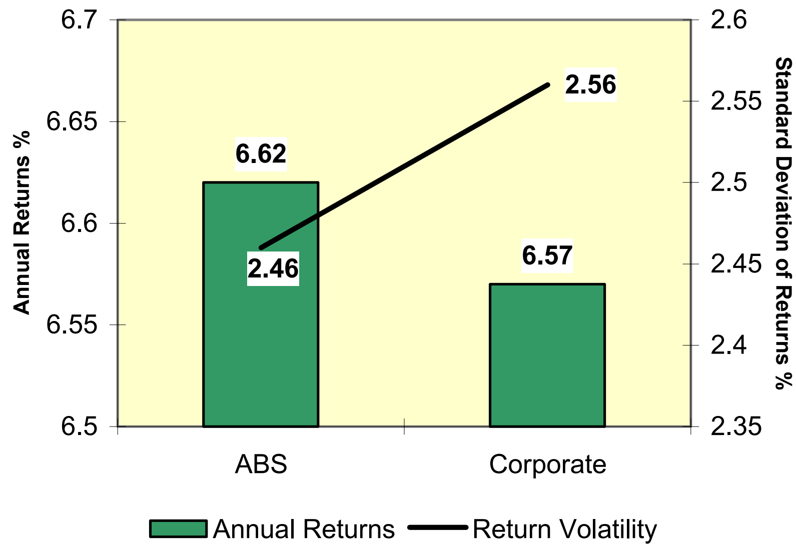
Master Index, currently at 1.8 years, one may reasonably deduce that the return characteristics are proportional to their investment horizons. We do believe, however, that the higher complexity of ABS structures demands a higher level of investment expertise and analytical capability than is the case with corporate bonds.

RETURN COMPARISON IN A VOLATILITY CONTEXT

In comparing the annual returns of the ML ABS Index against the AAA Corporate Index dating back to 1998, the first full year comparable data are available, we found that ABS had more desirable risk-adjusted return characteristics than corporate bonds.

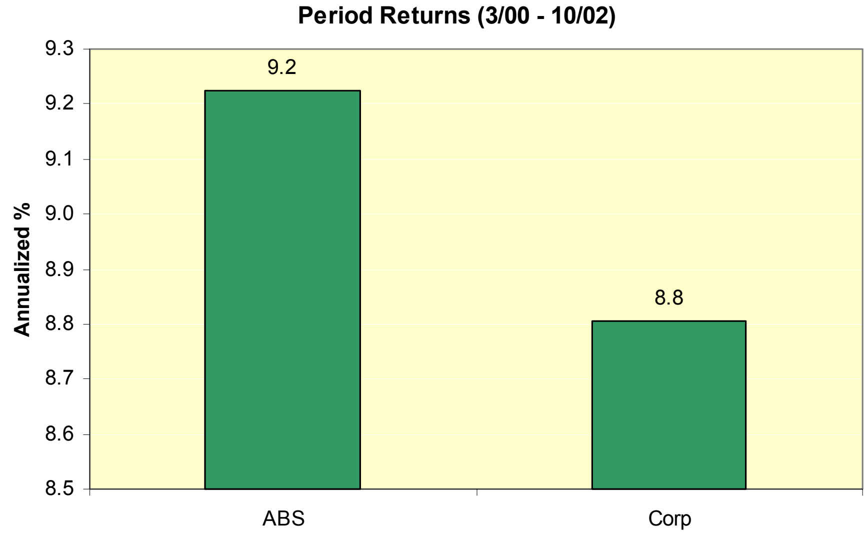


Source: Merrill Lynch Global Bond Indices on Bloomberg as of October 31st, 2004.

Higher Annual Returns: Our study shows that, between 1998 and 2003, asset-backed securities returned five basis points more than AAA corporate bonds. The average annual return of the ABS Index was 6.62%, while corporate securities generated 6.57% in total returns.

Reduced Return Volatility: With few exceptions, it is always more desirable to have investments that achieve a higher level of return with the same volatility, as measured by standard deviation, or the same level of returns at lower volatility. We found that, in the last six years, ABS managed to generate higher returns with lower year-over-year volatility. The above graph illustrates the volatility advantage of 10 basis points annually. Although the history may be too short to provide a conclusive argument of ABS' return advantage over corporate bonds, we think it is reasonable to accept that ABS can provide comparable returns at lower volatility.

Returns in a Distressed Environment: The fixed income community came out of the recent credit cycle recognizing the inadequacies of ratings alone as indicators of a bond's true credit risks. Performance of the ABS and corporate markets in this period confirmed a long-held view that in times of heightened credit risk aversion, ABS offer better investment protection, demonstrated by higher marked-to-market returns, than corporate securities, even though both carry AAA ratings.



Source: Merrill Lynch Global Bond Indices on Bloomberg as of October 31st, 2004.

This graph shows the return differential between the asset classes in a period with increased investor concerns toward credit risk. We chose the period between March 10th, 2000 and October 10th, 2002, marked by the precipitous fall of the NASDAQ market index from 5132 to 1108, as a test case of extreme investor risk aversion to credit products.

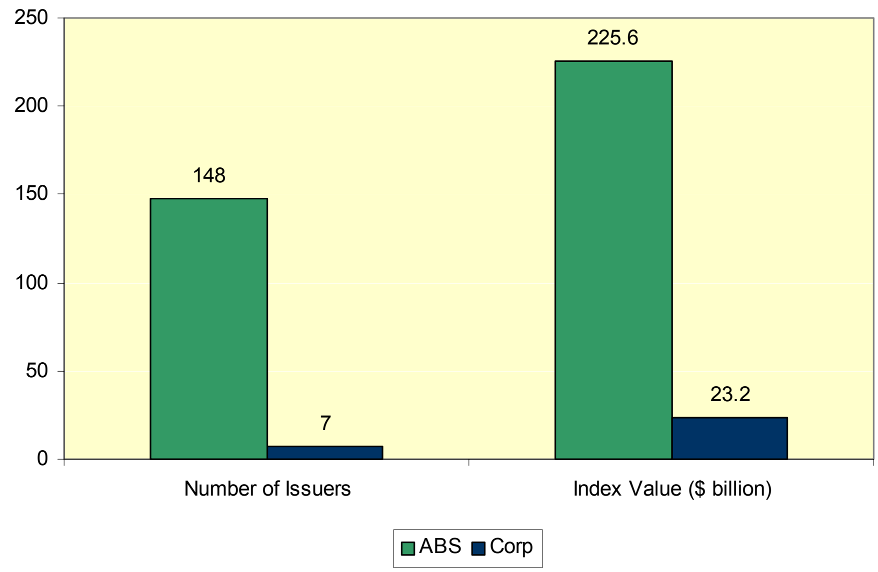
As the graph indicates, ABS provided an annualized return advantage of 41 bps over corporate securities. In fact, it has become a popular strategy to allocate more investments to ABS to reduce a portfolio exposure to event risk.

OPPORTUNITIES FOR SHORT-DURATION INVESTORS

While higher returns are certainly important, the popularity of ABS with short-duration investors comes primarily from better investment opportunities than corporate bonds and their low interest rate risk. In fact, the return comparison is largely an academic exercise since investment opportunities in AAA-rated corporate bonds with comparable maturities to ABS are extremely rare.

One way of looking at the availability of bonds is studying the constituents of the two indices we used in the previous comparison. As this graph indicates, there are a handful of corporate issuers rated AAA, with a total market value of $23 billion as of October 31st 2004. After excluding two European banks (Bayerische Landesbank and Banco Santander) and Merck which is no longer AAA, an investor's choices are limited to only four names: American International Group, General Electric, Toyota Motor Corp., and Pfizer.

By contrast, the same investor has a choice of over 1400 AAA-rated ABS bonds issued by 148 issuers, with a total market value of $225 billion.



Source: Merrill Lynch Global Bond Indices on Bloomberg as of October 31st, 2004.

Practically speaking, only a small percentage of bonds outstanding in an index are available on the secondary market at a given time. Investors with AAA investment policies that allow asset backed securities may be able to quickly put their cash to work and earn a higher yield than money market funds, while others with policies that restrict ABS pay the opportunity cost of waiting for that elusive AAA corporate to turn up. We frequently see short-duration investors reluctantly accumulating their exposure to Government Sponsored Enterprise (GSE) debt because of lack of diversification into other AAA-rated names.

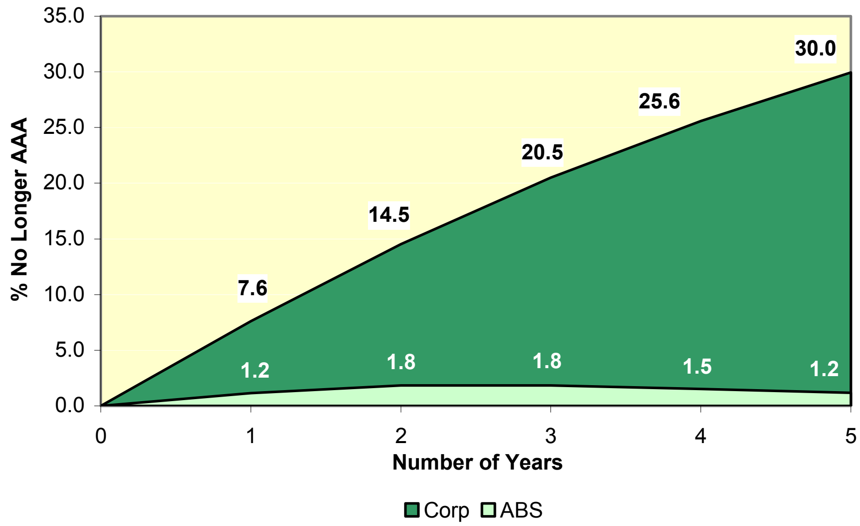
It is also helpful to mention that this comparison is more relevant to the short-duration investor than a buyer of longer maturities because an ABS' average life, a measure of approximate cash flows, resembles maturities between zero and three years of a corporate bond. This is part of the reason short-duration portfolios tend to have a higher ABS concentration.

HISTORY OF CREDIT RATING MIGRATION

In comparing the two groups of AAA-rated securities, we thought it was relevant to evaluate their abilities to maintain rating stability over time. Based on analysis of public data from Moody's Investors Services, we found more ABS tend to hold on to their AAA ratings longer than their corporate counterparts.

In our study, we define credit rating migration as the percentage of the AAA rating group that is downgraded over a five-year period, adjusted for factors such as maturities. The Moody's data showed 30% of AAA-rated corporate names eventually lost their top ratings over five years on average. The AAA ABS group, however, has been remarkably resilient, with less than 2% of its names losing the top ratings.

The empirical data are not surprising. As will be mentioned in the ABS Basics section, ABS transactions tend to demonstrate better rating stability because of their collateralized nature, other structural enhancements, diversified borrowers, and less exposure to event risk and business conditions.



Source: Moody's ABS migration table 1983-2003 (Published February 2004), Moody's corporate migration table 1970-2003 (November 2004).

PRACTICAL CONSIDERATIONS FOR CORPORATE CASH MANAGERS

Once a corporation decides that ABS investments are consistent with its short-duration investment objectives, a treasurer needs to consider the following common factors:

- **AAA Ratings:** Not all ABS transactions are rated AAA. A non-AAA ABS tends to have higher credit risk than a non-AAA corporate security because it is structurally inferior to the former in terms of payment priority. For corporate cash investors, we believe the risk reward trade-off favors investing in AAA ABS bonds.
- **Types of Collateral:** Different types of loans can have a direct impact on the credit quality of the ABS they collateralize. Borrower credit and an established history of asset pool statistics should be among the primary factors in choosing eligible investments. For example, manufactured housing notes, which are affected by borrowers' credit, and home equity notes, with very recent performance data, are less credit worthy than those backed by automobile and credit card borrowings, even though all may carry AAA ratings.
- **Rating Agencies:** Invest in securities that are rated by at least two major rating agencies. Ratings on ABS tend to rely more on historical statistical models, which are largely proprietary, than an analyst's experience and judgment. An ABS with two AAA ratings will likely suggest a statistical model error or methodology flaw is not present.
- **Maximum Maturity:** It is now a commonly accepted practice to use the expected maturity date, derived from average life, of an ABS to comply with the maximum maturity restriction in an investment policy.

The legal final maturity of an ABS, typically several years longer than its average life, has little relevance to its actual payment behavior[2].

CONCLUSION

Empirical market and rating agency data support the view shared by many short-duration investors that asset-backed securities provide comparable investment returns while incurring less credit risk and return volatility than AAA-rated corporate securities. With comparable data available going back to 1998, ABS investments have provided the investor with better returns, lower return volatility, broader investment selections and good event risk diversification benefits.

We believe this asset class is especially well suited for corporate cash accounts because of its high credit rating, low duration, ample market supply, established collateral performance history and better defense against event risks. The risk, return and liquidity characteristics of ABS are consistent with cash investors' goals of principal preservation, liquidity, and competitive returns. In fact, well over half of Capital Advisors Group's held-to-maturity portfolios incorporate ABS in their investment policies.

The scarcity of AAA corporate securities often forces investors to accumulate large positions in Government Sponsored Enterprises (GSE) as the latter are usually readily available. A practical comparison is, therefore, between AAA ABS notes and GSE debt. While not covered by this paper, the yield advantage of ABS over GSE debt has been supported by market data going back at least a decade. Moreover, with Fannie Mae currently in the hot seat and similar political event risk at other GSEs, the case for diversifying into better-yielding, comparable credit quality ABS has never been stronger.

Appendix: ABS Basics

WHAT ARE ASSET-BACKED SECURITIES?

As the name suggests, an ABS is a bond backed by financial assets such as car loans, credit card receivables, equipment leases, and student loans. ABS usually have very low credit risk, with about 90% of them carrying the AAA rating. Issuance, trading, settlement and payment processing of ABS are very similar to corporate and government securities, with a large and liquid market of buyers and sellers.

Though other types of ABS have recently gained popularity, public AAA-rated bonds backed by auto loans and credit card receivables are generally considered as the most conventional, most conservative, and most widely invested ABS sectors.

Banks and lenders are the major “originators” of ABS loans, followed by large manufacturers, such as automobile and appliance makers. Issuers of ABS are “bankruptcy remote” buyers of the loans, who are legally separated from, but economically tied to, the originators.

BENEFITS OF INVESTING IN ABS[3]

- **Higher yields:** Yields on AAA-rated ABS are not only higher than than comparable-maturity treasury and agency securities, but also higher than many corporate names in the same rating category.
- **High credit quality:** Generally carrying the highest credit rating of AAA, ABS are secured by collateral and credit-enhanced by structural features.
- **Investment Diversification:** The assets backing the bonds respresent many types of borrowers in different sectors and different regions. ABS also allow investors to reduce exposure to the corporate sector without sacrificing ratings or yields.
- **Lower event risk:** ABS are much less susceptible to event-risk downgrades as they are secured by underlying assets. By contrast, corporate bonds are unsecured debt of corporations that may be subject to mergers, management succession, fraud and other difficult-to-predict events.
- **Stable cash flows:** Investors buy many types of ABS with considerable confidence that the timing of payment will occur as expected, since the certainty and predictability of cash flows for these bonds has been time tested and market tested.

CHARACTERISTICS UNIQUE TO ABS

There are a few features of ABS that are not present in corporate bonds, of which investors need to gain more knowledge prior to investing.

Average Life: Unlike corporate bonds, the exact “maturity” date of an ABS is unknown at the time of issuance, as most loans allow borrowers to prepay with no early penalties. The "average life" is used to measure the time-weighted average maturity of all expected principal cash flows based on previous prepayment patterns.

Established ABS markets, such as automobiles and credit cards, have very stable and predictable prepayment patterns; therefore, the average life is a good indicator of principal re-payments. The investment community generally accepts using the average life of an ABS to comply with the maximum maturity restrictions in an investment policy.

Credit Enhancement: ABS usually get higher credit ratings than their sponsoring banks through a credit enhancement process with a variety of means, including: designating a certain portion of the bond issuance "subordinate" to the "senior" class in exchange for a higher yield, demanding a higher collateral balance than the bond it backs, establishing additional cash collateral, charging extra interest to pay for potential losses, and so on. An issuer can also enhance the bond's credit quality by getting bond insurance or lines of credit (LOC) from commercial banks.

Amortizing and Soft Bullet: As in home mortgages, principal investments of an auto ABS are returned to investors throughout the life of the debt. This process is called "amortizing." Credit card balances are revolving without a maturity date. By design, a credit card issuer can structure the bond as a "soft bullet"; i.e. one that makes a single lump sum principal payment on an expected, pre-determined future date. The term "bullet" is in contrast to "amortizing", and "soft" means that the date is an expected, not contractual, date for certain legal reasons.

NOTES:

1. According to Bloomberg data as of October 31st 2004, the modified duration of the ABS Master Index was 1.83 years, and the ML AAA-rated Corporate Index had a modified duration of 1.82 years. Since longer duration usually produces higher returns over time, analyzing returns of similar-duration bonds represents an apples-to-apples comparison. A bond's modified duration approximates its change in price from a 1% change in its yield.

2. Discussion of an asset-backed security's legal final maturity, along with several other technical factors, is beyond the scope of this paper. Investors are encouraged to call the author to have a more in-depth discussion.

3. Excerpt from *"An Investor's Guide to Asset-Backed Securities: Investing for attractive yield and high credit quality,"* a brochure by the Bond Market Association, the industry trade group of securities firms and capital markets banks. Full text is available at www.bondmarkets.com.