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Asset-Backed Securities as a Low Volatility Alternative to Intermediate Government Bonds

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Asset-Backed Securities

Every “security,” even as expansively as that term is defined in Section 2.a.1 of Securities Act of 1933², is of course “asset-backed” in a non-technical interpretation of that term. Whole life policies backed by an insurance company general account are in this general sense “asset-backed securities,” as are bank savings accounts.

“Securitization” in its broadest sense is nothing new, and is the core mission of all financial intermediaries. Increased specialization, and the development of trust structures that have as their one purpose to “repackage” liabilities in a form that has more predictable returns and greater liquidity, has contributed importantly to the ever-growing efficiency of capital markets in the United States.

The collateral that backs “asset-backed securities” is balances owed by individual debtors to a single firm. Home equity loans, auto loans and credit-card balances made up over 60 percent of ABS collateral for 2002 structures.³ With the collateral as its assets, a trust issues debt instruments, payments on which are supported solely by the collateral, and by any credit enhancement the trust may purchase from a monoline insurer. Imagination, capital market

demand, and the rating agencies impose the only limits on the form the obligations of the trust may have.

Market Environment

Although the long period of decline in interest rates appears finally to have come to an end, the still low level of available yields suggests that investors would be prudent to investigate alternatives to traditional investment strategies. Intermediate government bonds have long had a place in the asset allocation strategies of many fixed-income investors. Government securities eliminate credit risk and minimize the liquidity risk. Thus, they are well suited to adjusting portfolio duration according to the manager’s views on the duration of interest rates.

This article compares the risk/return characteristics of the Lehman 1-5 Year Government Index to that of the Lehman ABS Index. The rules for construction of the indices make them reasonable proxies for the investment universes open to managers for these two asset classes.⁴ For ABS in particular, the index is very stable.⁵

ABS is a very high quality asset class. Of the ABS included in the Lehman Index, 91.5 percent have a credit rating of AAA.⁶ Of the investment grade ABS

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2) The term “security” means any note, stock, treasury stock, security future, bond, debenture, evidence of indebtedness, certificate of interest or participation in any profit-sharing agreement, collateral-trust certificate, preorganization certificate or subscription, transferable share, investment contract, voting-trust certificate, certificate of deposit for a security, fractional undivided interest in oil, gas, or other mineral rights, any put, call, straddle, option, or privilege on any security, certificate of deposit, or group or index of securities (including any interest therein or based on the value thereof), or any put, call, straddle, option, or privilege entered into on a national securities exchange relating to foreign currency, or, in general, any interest or instrument commonly known as a “security,” or any certificate of interest or participation in, temporary or interim certificate for, receipt for, guarantee of, or warrant or right to subscribe to or purchase, any of the foregoing.

3) MARK HEBERLE, 2002 *Global ABS Issuance Review*, WACHOVIA SECURITIES STRUCTURED PRODUCTS RESEARCH, January 28, 2003.

4) See, e.g., *Index Turnover: A Guide to Global Index Dynamics and Compositional Drift during the First Six Months of 2003*, BRIAN UPBIN AND DAVE LAVELLE, in LEHMAN BROTHERS FIXED INCOME RESEARCH, July 31, 2003, pp. 38-43.

5) *Ibid.*, p. 41.

6) *Ibid.*, p. 30.

rated by Standard & Poors on January 1, 2003, none had defaulted by June 30, 2003.⁷ Based on multi-year rating transition data by rating category and the rating composition of the Lehman ABS Index, we calculate that the three-year default rate for the index is less than 1/10th of 1 percent.⁸

The table below analyzes 10 years of data for the period ending June 30, 2003. The rapid, and quite recent, growth in ABS means little is to be gained from including any earlier period. From 1988 to 2002, United States ABS issuance increased from \$14.3 billion to \$297.0 billion.⁹ From 1996 through 2002, worldwide ABS issuance increased from \$242 billion to \$606 billion.¹⁰ Total outstanding ABS is now \$1.33 trillion.¹¹

The duration of the ABS Index is 2.98, compared to 2.17 for the Government 1-5 Index. Investing in the ABS Index therefore involves more exposure to changes in the term structure of interest rates than does investment in the Government Index. The table below will include data that adjusts for the differences in duration.

It should also be noted that cash flow differences between the two indices could result in subtle return differences. The rules that govern inclusion in the Government 1-5 Index limit eligibility to U.S. Treasury and agency securities with average lives of

greater than one year but less than five years. The ABS Index includes securities with average lives in excess of 10 years. Therefore the shape, and change in shape, of the term structure of interest rates will affect the ABS Index differently from how they affect the Government 1-5 Index.

Risk/Return Characteristics

The table below sets out average returns, standard deviation of returns and Sharpe ratios for the Lehman ABS Index and for the Lehman Government 1-5 Index.¹²

The columns "Excess Return" shows the return difference between the ABS Index and Government 1-5 Indices and Treasury securities of like duration.¹³ For the comparison we are making between asset classes, the difference in excess returns is the most significant result, because it shows the return advantage of the difference in asset class. This difference is 0.035 percent for average monthly return, and 0.37 percent for an average rolling 12-month return. The rest of the difference in returns between the two indices (0.57 percent -0.51 percent -0.035 percent= 0.025 percent monthly and 7.23 percent - 6.50 percent

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	Lehman ABS Index data 7/93 to 6/03	Excess Return	Government 1-5 data 7/93 to 6/03	Excess Return
Average Monthly Return	0.57%	0.042%	0.51%	0.0073%
Standard Deviation	0.73%	0.24%	0.64%	-
Sharpe Ratio	0.28	-	0.22	-
Rolling 12 Month Average Return	7.23%	0.45%	6.50%	0.079%
Standard Deviation	3.39%	0.69%	2.99%	-
Sharpe Ratio	0.75	-	0.61	-

8) See ERKAN ERTURK, PATRICK COYNE, AND JAY ELENGICAL, Ratings Transitions 2002: U.S. ABS Weather a Turbulent Year, in STANDARD & POOR'S RATINGS DIRECT, January 31, 2003, pp. 7-8. The three year default rate for AAA was .02%, for AA, .31%, for A, 1.51% and for BBB, .97%.

9) Ibid., p. 10.

10) MARK HEBERLE, op. cit., p. 3.

11) Bloomberg CMO/ABS Market Profile, July 31, 2003.

12) Data is from the Lehman Live Web site, Lehman Brothers Global Family of Fixed Income Indices analytics section, July 23, 2003.

13) The Government 1-5 Index has a very small excess return because the index includes agency securities.



bid/offer spread for a \$0.1 million position will typically be from 0.50 percent to 1.0 percent more than for a \$5 million position. For home equity loan ABS, the typical bid/offer spread for a \$5 million position is 0.09 percent, and the increase in bid/offer spread for a \$0.1 million position is typically at least 1.0 percent.

Managers of large ABS funds would have at least 100 and up to 300 or more positions in their ABS portfolios.

To realize the full value offered by the comparisons to the Index set out above, with the degree of diversification considered prudent by experienced ABS managers, an ABS portfolio must be at least \$500 million. Investors with a smaller allocation to ABS should seek out a

low-expense commingled fund for their exposure to this asset class.

Conclusion

ABS is an asset class that offers a very high degree of safety, returns highly correlated with 1-5 year government bonds, with returns superior to those of government bonds on a risk-adjusted basis. Investors should consider replacing some or all of their allocation to intermediate government bonds with allocations to ABS. All but the largest investors should access this asset class using low-cost commingled funds. **■**

-0.37 percent = 0.36 percent rolling 12 month) is due to the difference in duration.

In recent years, the return advantage for ABS has been much greater than the 10-year averages shown above. For the 12-month periods ending in June 2003, June 2002 and June 2001, the return advantage for a twelve month average for ABS was .91 percent, 2.05 percent and 2.13 percent respectively. For those same periods, the excess return was -0.11 percent, 1.63 percent and 1.53 percent. Again, recent ABS excess return has been significantly greater than the 10-year average.

These differences are very significant at the low-risk end of the risk/return spectrum. Investment managers might well consider allocating some part of their exposure to intermediate government obligations to ABS.

Diversification and Transactions Costs

The rapid, massive growth in ABS issuance and in ABS outstanding has greatly increased the economic efficiency of the ABS market. However, transaction costs vary significantly by position size. For a \$5 million position in the credit card or automobile sectors, the bid/offer spread is typically about 0.03 percent. The bid/offer spread for a \$0.5 million position will typically be from 0.25 percent to 0.45 percent more than for a \$5 million position, and the

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