

## DWIGHT ASSET MANAGEMENT COMPANY

### CORPORATE BONDS: THE FIRST SPREAD PRODUCT\*



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*Corporate bonds, the first such yield-advantaged sector in the U.S. fixed income market, deserve attention because of their demonstrated record of producing superior returns relative to comparable Treasury securities.*

Fundamental to the investment process at Dwight is our expertise in employing “spread product” in the portfolios we manage. “Spread product” is defined as any fixed income instrument that yields more than a comparable U.S. Treasury security. Since 1973, yield (specifically, coupon return and its reinvestment) has contributed in excess of 90% of the total return in bonds. Corporate bonds, the first such yield-advantaged sector in the U.S. fixed income market, deserve attention because of their demonstrated record of producing superior returns relative to comparable Treasury securities. In addition, the corporate bond sector evidences sufficient scale for investment, a variety of cash flow structures, and varying degrees of credit exposure. This sector is constantly developing in terms of both product and investment approaches. At Dwight we devote considerable resources to the successful use of corporate bonds in our client portfolios.

#### Scale of the Corporate Bond Market

Corporate bonds reflect a relatively long history in the U.S. fixed income market. The first corporate bond issue in the modern era likely dates back to the construction of the transcontinental railroads shortly after the conclusion of the Civil War.<sup>1</sup> One such issuance was that of the Northern Pacific Railroad.<sup>2</sup> The issue was underwritten and offered to the investing public through a “syndicate” of banks and brokers and eventually raised \$30 million for the construction of the railroad. Today, by way of contrast, the U.S. corporate bond market stands at over \$1.3 trillion and represents some 40% of the global market for corporate bonds, with maturities ranging from one year to as many as 100 years.<sup>3</sup>

#### Corporate Bond Credit Assessments

Corporate bonds also offer considerable choice

regarding exposure to credit risk. Naturally, issuers vary in terms of their perceived ability to repay, which is largely captured in the credit rating assigned to a current or prospective issuer of debt by one of the recognized rating agencies.<sup>4,5</sup> The decision on what level of creditworthiness to hold is a critical element in knowing which bond to own. Bonds with lower perceived creditworthiness, for example, typically carry higher yields (see Fig. 1, below). Another element is the industry in which the issuer operates. Issuers in the corporate bond market come from virtually every industry in the U.S. economy. The major industry categories are industrials (manufacturing, transportation, telecom, media, and retail); finance (banks, finance companies, insurance, and brokerage); and utilities. Some industries are regarded as inherently riskier than others and consequently carry higher yields for similarly rated credits. A good example is the securities brokerage industry, whose bonds typically carry higher yields than similarly rated industrial bonds.

#### Cash Flow Structures of Corporate Bonds

Corporate bonds also feature an assortment of ▶

**Fig. 1**

**Yield Differential Corporate Bonds Rated Baa–Aaa 1973–2004**



Source: Federal Reserve Statistical Release H-15, compiled by Moody's

\*Please see endnotes on p. 4

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- ▶ payment structures. While the vast majority of corporate bonds pay interest on a semiannual basis, they differ in the manner in which they repay principal. The most significant repayment structures include conventional fixed maturities, callables, puttables, and sinking fund bonds.<sup>6</sup> Structure choices allow an investment manager to tailor exposure in order to take advantage of anticipated changes in interest rate volatility, among other things. Callable bonds, for example, tend to outperform in periods of quiescent markets, while puttable bonds tend to outperform during periods of increasing interest rate volatility. Sinking fund bonds, on the other hand, can be useful either in meeting certain specified liquidity needs for a portfolio or in systematically reducing principal risk to a particular issuer over time.

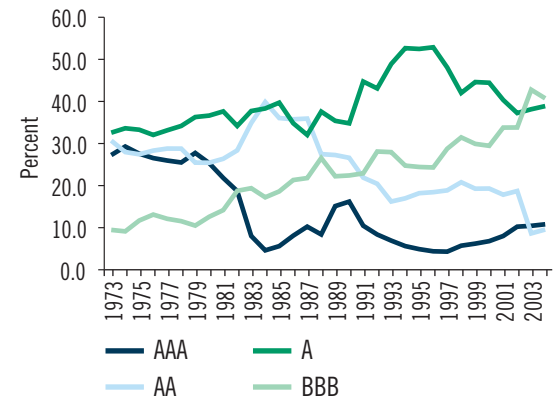
### Performance of the Corporate Bond Market

While corporate bonds clearly possess many desirable attributes, the ultimate motivation for investing is the demonstrated return potential. In this regard, corporate bonds possess a superior demonstrated return history.

Corporate bonds returned 7.70% per year over the 13-year period ending December 31, 2004.<sup>7</sup> This was the best return of any major sector of the U.S. fixed income market. Agencies, for example, returned 6.86% while mortgage-backed securities (MBS) returned 6.72% and asset-backed securities (ABS) returned 6.64%. U.S. Treasury securities, by way of contrast, returned 6.79% over the same period. When measured on a calendar-year basis, corporate bonds have registered the best performance against any of these other sectors in seven of the last 13 years.

Gross returns tell only part of the story, however.

**Fig. 2**  
Composition of the Lehman Credit Index by Credit Rating, 1973–2004



Source: Lehman Brothers Global Family of Indices

The various sector index returns represent different inherent exposures to changes in the general level of interest rates (measured with duration). The cleaner comparison requires an adjustment for duration differences among the major sectors of the fixed income market. On this basis, corporate bonds still compare favorably. Over the same time period, the average quarterly excess return relative to Treasuries adjusted for duration stands at 12 basis points per quarter for corporate bonds, 8 basis points for agencies, and 4 basis points for MBS. Only ABS bested corporates at 16 basis points per quarter.

In addition to issuer and industry-specific risk, the entire corporate bond market has become riskier in recent years. This is a result of two simultaneous developments: a steady erosion in overall creditworthiness and the shift to a more service-oriented economy. The average level of creditworthiness reflected in the Lehman Corporate Index has fallen from AA in 1973 to A as of December 31, 2004. As of year end, fully 40.7% of the Lehman Corporate Index was rated BBB, compared to only 9.5% in 1973 (see Fig. 2, above).

Meanwhile, the utility sector has contracted. At ▶

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► year end, it represented a mere 8% of the Lehman Corporate Index, down from 63% in 1973. Conversely, the finance sector, which represented only 13% of the Index in 1973, has experienced rapid growth and represented 38% of the Index at year end.

These secular developments make it imperative for investment managers to pick the right security. Quantitative studies confirm that security selection is more important than either duration or sector/quality allocation decisions in adding excess return.<sup>8</sup> For all these reasons, it is essential that investment managers assemble teams of highly experienced professionals (15 with a credit focus in Dwight's case) with areas of expertise that can help uncover superior relative value.

### Corporate Bonds and the Equity Market

Traditionally, corporate bond managers eschewed comparisons to equity management. Bonds, by virtue of their seniority in the claim structure of an issuer, were viewed as insulated from the relatively short-term financial vicissitudes affecting an issuer that so often influence equity valuations.

Modern theories of corporate finance and the introduction of "event risk" starting in the late 1980s have resulted in breaking down the distinction between equity and bond valuations.<sup>9</sup> As a result, quantitative models of credit risk have emerged where at least one of the explanatory variables is the variability of an issuer's equity price.<sup>10</sup> Because the models are quantitatively driven, they can be run continuously in real time. This allows for the direct application of the results of these models to the continuous pricing of credit risk, which in turn has facilitated the development of credit derivative products such as credit default swaps (CDS). A CDS allows an investor to assume synthetically created

credit exposure to, or against, a particular issuer or group of issuers. Our preference is to favor credit exposure either to baskets of issuers or to a credit index.

At Dwight we constantly canvass the market for innovative and effective approaches to credit exposure. Our demonstrated preference for basket or index products in large part reflects our philosophy that fundamental credit analysis is particularly effective in the selection of actual securities. We believe quantitative approaches to credit assessment are best suited to constructing baskets or indices of synthetic exposures that can be tailored to meeting our expectations on a more macro level.

### Conclusion

Corporate bonds deserve a place in fixed portfolios, based on the long-term value opportunity they possess. This important component of the fixed income market has evolved highly since the 19th century in size, types of structure and products, and credit quality. Commensurate with this growth and complexity is the need to dedicate significant and focused resources to this huge component of the capital markets. The appetite for corporate bonds—the yield premium demanded from corporate bonds versus Treasuries—is dynamic and generally reflective of a particular macroeconomic horizon. Despite our optimistic views for GDP growth for the balance of 2005, it is our opinion that conservative prudence is in order, given the low yield premiums (high prices) offered by the sector. Our expectation for the remainder of the year is that selective buying opportunities will drive our overall exposure to the sector. ■

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**Endnotes**

1. We define the "modern era" as one in which the issuance carries no governmental guarantee and is underwritten and distributed through a "syndicate" of financial intermediaries using an offering memorandum.
2. Interestingly, Vermont played a significant role in the early development of the corporate bond market. The ownership and board of the Northern Pacific Railroad was dominated by a group of individuals referred to as the "Vermont Clique." These individuals appealed to Jay Cooke to act as the financial advisor and underwriter of the above-mentioned bond issuance. Jay Cooke & Co. was prominent at that time as the exclusive agent to the U.S. Treasury in financing the Civil War. Cooke himself is generally credited with coining the term "syndicate" as it applies to the marketing of bonds.
3. For the purposes of this piece we will confine our discussion to the universe of bonds eligible for inclusion in the Lehman Brothers Corporate Bond Index (Lehman Corporate Index), which includes investment grade bonds issued by U.S. corporations. Unless otherwise indicated, all information in this piece is as of December 31, 2004.
4. Investment-grade bonds are rated according to one of four major rating categories. Listed in descending order of creditworthiness, these categories are AAA, AA, A, and BBB.
5. Currently, three of the nationally recognized statistical rating organizations (NRSROs) each evaluate most of the corporate bonds issued in the U.S.: Moody's, Standard & Poor's, and Fitch.

6. Callable bonds (such as the Northern Pacific Railroad bonds) are redeemable prior to maturity at the issuer's option at specified times. Puttable bonds can be presented for payment to the issuer by the bondholder at specified times prior to maturity. Sinking fund bonds feature partial principal redemption prior to maturity on a specified amortization schedule.

7. The comparison period dates back to when the latest sector was added to the Lehman Brothers Aggregate Bond Index.

8. "Value of Security Selection vs. Asset Allocation in Credit Markets: Part II—An 'Imperfect Foresight' Study," June 2000, Lehman Brothers

9. Event risk is defined as "the likelihood that the rating of a bond will drop due to an event, such as the taking on of additional debt or a recapitalization by a company." One of the earliest and best-known examples of event risk was the leveraged buyout (LBO) of RJR in 1988. This LBO formed the basis for the book "Barbarians at the Gate" by Bryan Burrough and John Helyar.

10. The best-known quantitative model was developed by KMV and was subsequently purchased by Moody's, the aforementioned NRSRO. Fundamentally, all these models tend to be quite similar. They typically depend on three factors: the relative size of an issuer within its industry; financial leverage on the balance sheet; and the volatility of the issuer's equity price. Normalized values for each factor are developed and integrated to produce a credit score usually ranging from a one, the least creditworthy, to a 100, the most creditworthy.

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Fred oversees fixed income portfolios. Formerly, Fred served as a Sector Portfolio Manager on the Dwight Investment Team specializing in investment-grade corporate bonds and agencies. Prior to joining Dwight, he was at Dewey Square Investors Corporation and World Asset Management.

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