

High-Yield Bond Market Primer

Introduction

High-yield bonds are debt securities issued by corporations with lower-than-investment grade ratings. The issuing companies usually are seeking money for growth (via M&A, perhaps), working capital or other cash flow purposes.

The non-investment grade ratings – lower than BBB- by Standard & Poor's, Baa2 by Moody's and BBB- by Fitch – suggest a higher chance of an issuer default, wherein the company does not pay coupon interest or the principal amount due at maturity in a timely manner. Thus, these companies must offer a higher interest rate – and in some cases additional investor-friendly structural features – to compensate for bondholder risk, and to attract buying interest.

Other terms for high-yield, such as “speculative-grade” and “junk bond,” have given the asset class some negative connotation over the years, but high-yield has matured into a solid 20% of the overall corporate bond market, which itself is estimated at roughly \$5 trillion, larger than both the U.S. Treasury market (\$4 trillion outstanding) or the municipal bond market (\$2 trillion outstanding), according to Bond Market Association estimates.

Issuance

High-yield bond issuance usually entails three steps:

- Investment bankers draft the offering proposal and negotiate conditions with potential investors
- Once terms are finalized, the securities are allocated to bondholders
- Soon the bonds are available for purchase and sale in the aftermarket, or secondary, via broker/dealers

There are a variety of bond structures across the landscape of high-yield, but two characteristics are constant:

- Coupon, or the rate of interest the entity pays the bondholder annually
- Maturity, when the full principle amount of the bond issue is due to bondholders

Background

Corporate bonds have been around for centuries, but growth of the non-investment-grade market did not begin until the 1970s. At this time, the market was composed primarily of companies that had been downgraded for various reasons from investment-grade, becoming “fallen angels,” and which continued to issue debt securities. The first real boom in the market followed, in the 1980s, however, when leveraged buyouts and other merger activity appropriated high-yield bonds as a financing mechanism. One famous example is the \$31 billion LBO of RJR Nabisco by private equity sponsor Kohlberg Kravis & Roberts in 1989. The financing backing the deal included five high-yield issues that raised \$4 billion.

Since then, more companies have found acceptance with a growing pool of investors as the high-yield market developed. High-yield bonds still are used to finance merger and acquisition activity, including LBOs, and often back dividend payouts to sponsors, and the market still supports funding capital-intensive projects, such as telecommunications build-out, casino development and energy exploration projects. These days, though, the market also is a good deal of its own refinancing mechanism, with proceeds often paying off older bonds, bank loans and other debt.

The high-yield market matured through increasing new bond issuance, which reached peaks of roughly \$140 billion issued per year in both 1998 and 2004, and via additional fallen angels, most notably Ford Motor Company and General Motors in 2005. Indeed, with the automakers' combined \$80 billion of fallen angel corporate bonds entering the market, high-yield has ballooned from around \$200 billion in 1995 to roughly \$1 trillion in 2006. Steady growth saw only a few notable speed bumps, such as the savings & loan scandal in the 1980s and the correction after the technology bubble burst in 2001.

The issuers

Companies with outstanding high-yield debt cover the full spectrum of industry sectors and categories. There are industrial manufacturers, media firms, energy explorers, homebuilders and even finance companies, to name a few. The one thing in common – indeed the only thing – is a high debt load, relative to earnings and cash flow (and, thus, the non-investment grade ratings). It's how the issuers got there that breaks the high-yield universe into categories.

The first high-yield companies were the “fallen angels,” or entities that used to carry higher ratings, before falling on hard times. These companies might find liquidity in the high-yield market and improve their balance sheets over time, for an eventual upgrade. Some fallen angels often hover around the high-grade/high-yield border, and frequently carry investment grade ratings by one agency and non-investment grade by another. These often are referred to as “split-rated” or “five-B” bonds. Other issuers might never improve, and head further down the scale, toward default and/or bankruptcy.

Frequently, high-yield issuers are start-up companies that need seed capital. They do not have an operational history or balance sheet strong enough to achieve investment grade ratings. Investors weigh heavily on the business plan and pro forma financial prospects to evaluate prospects with these scenarios. Telecommunications network builds and casino construction projects are examples.

Other capital-intensive businesses, such as oil prospecting, find investors in the high-yield bond market. As well, cyclical businesses, such as chemical producers, use the high-yield market to weather downturns.

Leveraged buyouts (LBOs) typically use high-yield bonds as a financing mechanism, and sometimes the private investors will use additional bond placements to fund special dividend payouts. This part of the market saw explosive growth in 2005-06, amid a buyout boom not seen since the late 1980s.

Bankruptcy exit financing can be found in the high-yield market. Power producer Mirant is a recent example. The company emerged from Chapter 11 in late 2005 after securing \$2.35 billion in exit financing, which included an \$850 million issue of 7.375% bonds due in 2013. The deal was well-received in market despite past investor losses with the credit and the complex restructuring efforts.

The investors

Investors in high-yield bonds primarily are institutions seeking to earn higher rates of return than their investment-grade corporate, government and cash market counterparts. Other investors include hedge funds, individuals and arrangers of instruments that pool debt securities. Some common investor groups:

- Mutual funds represent approximately 35% of the investor pool. These institutional investors might be managing traditional, long-only high-yield funds or portfolios that invest only in high-yield securities, but via both long- and short-positions. As well, there are corporate bond funds that invest in both high-yield and high-grade bonds, and general fixed income funds that hold positions across corporate, government and municipal securities segments.
- Pension funds account for roughly 25% of high-yield investors. They seek greater return on the retirement money entrusted to them than what's being paid out to retirees. Pension funds are trustees for the retirement money and act under prudent investment rules, which vary state to state.
- Insurance companies invest their own capital and account for around 16% of the high-yield investment community. These accounts cover insurance and annuity products.
- Collateralized debt obligations, or CDOs, comprise another 16% of the market. These packaged debt instruments invest in a pool of securities for a lower risk of default. Thus, the pool of bonds, or basket of securities, receives higher credit ratings. There are bond-only instruments known as CBOs, loan-only instruments known as CLOs and packages of both, which are generically described as CDOs.

- The balance of the high-yield investment community comprises hedge funds and other specialized investors, as well as a very small amount of individual investors. Hedge funds have had a growing presence in the high-yield market over the 2003-05 bull market.

(Source: Merrill Lynch year-end 2004)

High-yield bond characteristics

As stated, there are many ways a high-yield bond can be structured, but all have two defining traits

1. Coupon
2. Maturity

These two characteristics define the value of each bond, and are used as to name the individual security, such as "GM's 7% notes due 2012," or even, "GM's 7's of 12." Other characteristics include whether, when and at what price a bond is callable by the issuer, conditions on a put by the bondholder, covenants related to financial performance and disclosure, and even equity warrants.

Coupons typically are fixed-rate and pay twice annually. The average coupon for non-investment grade companies have been in the 8.5% area in recent years, but double-digits are by no means an exception. Some pay no coupon at all. These deals are often called "zero-coupon bonds," "zeros," or "zips," and are sold at a steep discount to face value by companies that might not have the cash flow to pay interest for a number of years. Here, investor return comes in the form of capital appreciation, rather than from interest payments. Zeros were popular with Internet start-ups and wireless build-out projects in the late 1990s.

Certain deals are more attractive with a floating-rate coupon. These deals, referred to as "floaters" or "FRNs" most often pay interest quarterly, and at a spread priced to the LIBOR rate. This type of coupon is popular amid an environment of rising interest rates, such as 2004 and 2005. During these years, floating rate issuance increased to 8% and 12% of all new issuance, from merely 1% of supply in 2003.

Another option is for a coupon to pay "in-kind," or with additional bonds rather than cash. These deals, known as "PIK" notes, give the issuer breathing room for cash outlay, just as with zero-coupon bonds. PIKs allow a company to borrow more money – leverage up – without immediate concerns about cash flow. Thus, as with zero-coupon paper, PIKs are viewed as more highly speculative debt securities.

A recent innovation in the high-yield capital markets was the introduction of PIK FRNs, though these types of securities are uncommon.

High-yield bonds by and large are arranged to mature within seven to 10 years. But, again, there are exceptions. More highly speculative companies might set a high coupon to attract buyers, but shorter tenors to allow for quicker refinancing. Likewise, higher-quality high-yield issuers might lock in a low rate on paper with 12-year maturity if market conditions present such an opportunity.

Typical bond characteristics:

- **Call protection** limits the ability of the issuer to call the paper for redemption. Typically, this is half of the term of the bonds. For example, 10-year paper will carry five years of call protection, and eight-year bonds cannot be called for four years. None of this is set in stone, however, and often these terms are negotiated amid the underwriting process. Thus, the market sometimes sees seven-year (non-call 3) paper or eight-year (non-call 5) bonds. Floating-rate paper typically is callable after one or two years.
- **Call premiums** come into effect once the period of call protection ends. Usually, the premium on the first call date is par plus 50% of the coupon, declining ratably thereafter each year. An example: For 9% notes due in 10 years and carrying five years of call protection, the bonds are callable at 104.5% of par upon the fifth year outstanding, then at 103, 101.5 and par in the following years, representing a par-plus-50% coupon, 33%, 17% and par.

- **Bullet structure** is the colloquial phrase for full-term call protection. Also described as non-call-life, this characteristic draws buying interest due to lower refinancing risk. However, bullet notes command lower relative yields for the same reason.
- **Make-whole call** premiums are standard in the investment-grade universe and prevalent in high-yield. This feature allows an issuer to avoid entirely the call structure issue by defining a premium to market value that will be offered to bondholders to retire the debt early. It's a call, in a sense, but at a relatively exorbitant price. The lump sum payment plan is composed of the following: the earliest call price and the net present value of all coupons that would have been paid through the first call date, which is determined by a pricing formula utilizing a yield equal to a reference security (typically a U.S. Treasury note due near the call date), plus the make-whole premium (typically 50 bps).
- **Put provisions** are the opposite of calls. These features allow bondholders to accelerate repayment at a defined price due to certain events. The most common example is the change-of-control put, usually at 101% of par. In this case, when a specific percentage of the company is purchased by a third party, there is a change in the majority of the board of directors, or other merger or sale of the company occurs, the bonds must be retired by the issuer.
- **Equity clawbacks** allow the issuer to refinance a certain amount of the outstanding bonds with proceeds from an equity offering, whether initial or follow-on offerings. A typical clawback would be for up to 35% of the outstanding bond issue at a level equal to par, plus the coupon. An example: Company A raises money via an IPO and exercises a clawback for a portion of its 10% bonds at a repurchase price of 110% of par. This is an optional redemption for the issuer and, while the investor has no say or obligation, the repayment premium is tough to disregard.
- **Equity warrants** often are attached to the most highly speculative bond issues. In this case, each bond carries a defined number of warrants to purchase equity in the company at a later date. Usually an issue carries warrants for ownership in 2-5% of the company, but 15-20%, while not the norm, is not unheard of for speculative start-ups.
- **Escrow accounts** are created to cover a defined number of interest payments. This feature is popular with build-out transactions, such as the construction of a casino. Escrow accounts typically range from 18 months (three interest payments) to 36 months (six coupons).

It is important to note that none of these features is set in stone. Terms of each can be negotiated amid the underwriting process, whether to the benefit of the issuer or investors, depending on the credit, market conditions and investor preferences. A really hot bond offering might see call protection shortened by one year, which benefits the company, or a tough deal could see the first call increased from par+50% coupon to par+coupon, to encourage buying interest. A struggling new issue from a start-up might be forced to tack on equity warrants to sweeten the deal.

Covenants

High-yield bond issues are generally unsecured obligations of the issuing entity, and covenants are looser than on bank loans, providing the issuer more operating flexibility and enabling the company to avoid the need for compliance certification on a quarterly basis.

The indenture includes the description of covenants. Typical covenants:

- Limitation on incurrence of additional debt
- Limitation on restricted payments
- Limitation on dividends and payments affecting subsidiaries
- Limitation on liens
- Limitation on sale and leaseback transactions
- Limitation on asset sales
- Limitation on merger or consolidation

Many times, covenants will be reworked during the marketing process to assuage investors. Sometimes ratios and timeframes are reworked, and other times entire covenants are added or deleted. The high-

yield indenture generally is viewed as “tighter” than that on investment-grade bonds, but looser than on bank loan indentures. Marketing of an accelerated placement from a well-known and seasoned issuer sometimes will carry little or no covenants, and is referred to colloquially as having an investment-grade covenant package.

Bond math

- **Yield to maturity** is the interest rate that equates the present value of a bond's cash flow to its current price. Yield to maturity assumes that the bond will be held to maturity, and that all interim cash flows will be reinvested at a rate equal to the yield to maturity. If the bond is not held till maturity, or if interim cash flows are reinvested at a rate that differs from the yield to maturity, an investor's actual yield will differ from the yield to maturity. (Since the yield to maturity calculation equates a bond's cash flows to its current price, this yield calculation considers both coupon income and any capital gain or loss the investor will realize by holding the bond till maturity.)
- **Yield to call** is the yield on a bond assuming the bond is redeemed by the issuer at the first call date. Yield to call differs from yield to maturity in that yield to call uses a bond's call date as the final maturity date (most often, the first call date). Conservative investors calculate both a bond's yield to call and yield to maturity, selecting the lower of the two as a measure of potential return. Like yield to maturity, yield to call calculates a potential return: it assumes that interest income on a particular bond is reinvested at its yield to call rate; that the bond is held to the call date; and that the bond is called..
- **Yield to worst** is the lowest yield generated, given the stated calls prior to maturity.
- **Current yield** describes the yield on a bond based on the coupon rate and the current market price of the bond (not on its face or par value). Current yield is calculated by dividing the annual interest earned on a bond by its current market price. For example, a \$1,000 bond selling for \$850 and paying an 8% coupon rate (or \$80 per year) has a current yield of 9.41% (the quotient of \$80 divided by \$850). The coupon rate in this example is 8% (80/1,000).
- **Duration** is a measure of bond or bond fund's price sensitivity to changes in interest rates. Duration is defined as the weighted average term to maturity of a security's cash flows, where the weights are the present value of each cash flow as a percentage to the security's price. The greater a bond or fund's duration, the greater its price volatility in response to changes in interest rates. Duration provides an estimate of a bond's percentage price change for a 1% change in interest rates. For example, the price of a bond with a duration of 2 would be expected to move 2% for every 1% move in interest rates.

(Source: The McGraw Hill Companies / Businessweek Online)

Registration

High-yield bond offerings are not typically registered with the SEC. Instead, deals most often come to market under the exception of Rule 144A, with rights for future registration once required paperwork and an SEC review is completed. A small percentage of deals comes to market as “144A-for-life,” meaning without registration rights. In both cases, the issuer is not required to make public disclosures while issuing under the rule.

Either way, the rule 144A exception essentially modifies the SEC's requirement for investors to hold privately placed securities for at least two years. Instead, “qualified institutional buyers” or “QIBs” – defined under Rule 144A as purchasers that are financially sophisticated and legally recognized by securities regulators to need less protection from sellers than most members of the public – can buy and sell these securities sans-registration.

Deals that carry registration rights most often will be exchanged for an identical series of registered paper once the time and effort of SEC registration follows through, typically three months from issuance. This private-to-public debt exchange is not a material event for bond valuation, but registration in effect enhances the liquidity of the paper, given it is available to more investors. Conversely, deals issued under Rule 144A for life often are viewed by market participants as inherently less liquid instruments.

Registration with the SEC takes many months, so frequent issuers will make a shelf filing in advance of any market activity. Shelf filings can cover any type of security, or be debt-only, but in both cases

the issuer may issue securities only up to the size of the shelf filing. Shelf filings are rated in advance of any transaction.

In July 2005 the SEC put in place "automatic registration" shelf filings. This filing is a relaxed registration process that applies to well-known, seasoned issuers (WKSI), and covers debt securities, common stock, preferred stock and warrants, among other various instruments. A WKSI is a company that has filed all annual, quarterly and current reports in a timely manner, and either has a greater than \$700 million market capitalization or has issued \$1 billion in registered debt offerings over the past three years.

The offering

The high-yield bond offering follows a customary path of underwriting that includes the following steps:

1. Preparation of the prospectus, or an offering memorandum
2. Negotiating terms with investors
3. Syndication and allocation

Often, the process is often more fluid and less exact than with other fixed-income securities because the issuer has a "story" to tell to market the deal, because issuers and underwriters are subject to more questions, given the higher risks, and because deal structure can be reworked numerous times.

Before awarding a mandate, an issuer might solicit bids from arrangers. The banks will outline their syndication strategy and qualifications, as well as their view as to where the offering will price. Once the mandate is awarded the syndication process starts.

The offering memorandum (prospectus or red herring) is drawn up by the bankers ahead of, or amid, an issuer mandate. The document typically will include an executive summary, investment considerations, an industry overview and a financial model. The actual bond terms have not been finalized, but often pro forma coupon rates are described to help financial modeling. The syndicate desk likely will try to obtain feedback from potential investors regarding appetite for the deal. Once this intelligence has been gathered the agent will market the deal to potential investors.

Because most bond offerings are sold privately under Rule 144A, this will be a confidential offering made only to qualified banks and accredited investors. Publicly available deals will file their prospectus with the SEC via form 424B2.

The prospectus will contain an executive summary that includes a description of the issuer, an overview of the transaction and rationale, sources and uses, and key financials. Risk factors will be detailed, though often they are boilerplate, including such lines as "indebtedness could have a material adverse effect on our financials" and "future strategies may not be successful." Considerations about income taxes also might be discussed.

The list of terms and conditions are detailed in a preliminary term sheet describing the pricing, structure, collateral, covenants and other terms of the credit (covenants usually are negotiated in detail after the arranger receives investor feedback).

Commitments by the underwriters will be described. In addition to the amounts each syndicate desk intends to offer accounts, fees received by underwriters from the issuer might be detailed, ranging anywhere from 1% per \$1,000 face bond to 3.25% (and sometimes higher), depending on the issuer, sector and market conditions.

The industry overview will be a description of the company's industry and competitive position, relative to its industry peers. The financial model will be a detailed model of the issuer's historical, pro forma, and projected financials (sometimes, also, management's high, low and base case for the issuer). For some institutional investors, which buy high-yield and other public securities, the financial model might be stripped of projections and other non-public data.

Most new deal marketing efforts are kicked off internally via a "teach-in" meeting, where bankers pitch the deal to sales staff, describing the terms of the offering and what purpose it serves. Roadshows

follow, where company management provides its vision for the transaction, as well as a business update.

Syndication

There are three primary types of syndications: an underwritten deal, a “bought deal” and a rate back-stop deal. Less common are niche placements, similar to loan market “club deals,” which are negotiated with just a handful of accounts.

- **Underwritten:** The transaction is marketed on a “best-efforts” basis. The financial institution underwriting the deal has no legal obligation to the issuer regarding completion of the transaction. This is the most common placement method. Issuers range across all industries. First-time issuers without a proven cash flow record are especially common in underwritten transactions.
- **Bought deal:** The transaction is fully purchased by the underwriter at an undisclosed rate before marketing, and therefore is subject to market risk. This method removes execution risk to issuing companies, which are most commonly well-known and seasoned issuers. Timing is typically a day or less, which helps remove some market risk. Underwriters use this method to compete among themselves for business, but if they are too aggressive, and are unable to fully subscribe the deal, they are forced to absorb the difference, which they may later try to sell in the aftermarket. This is easy, of course, if market conditions – or the credit’s fundamentals – improve. If not, underwriters might have to take a loss on the paper or hold more than intended.
- **Back-stop deal:** The underwriter agrees to purchase the deal at a maximum interest rate for a brief, but well-defined, period of time. This method is similar to a bought-deal, but the timeframe typically is longer, generally up to one week. Both seasoned issuers and unfamiliar credits may utilize this type of underwriting.

Secondary markets

Once bond terms are finalized and accounts receive allocations from the underwriters, the issue becomes available for trading in the aftermarket. Secondary trading of high-yield bonds is a well-established and active marketplace. Broker-dealers often traffic in the “grey market” before the paper is “freed to trade,” and in some cases there are grey market indications even before terms of the offering are finalized.

A move toward more transparent pricing comes on the heels of the full implementation of Trade Reporting and Compliance Engine (TRACE), the NASD’s bond trade reporting system. Broker-dealers now report all trades of corporate bonds, including all registered high-yield issues, mostly within five minutes of execution.

The high-yield trading published by TRACE has its roots in a NASD system, FIPS, which provided hourly dissemination of prices and trading volumes of 50 liquid high-yield credits.

Companies such as MarketAxess Holdings and TradeWeb, owned by Thomson Corp., in turn provide almost real-time high-yield bond prices on their platforms.

Most bond traders have opposed increased market transparency, which erodes margins as bonds change hands. Investors generally say they want to trade the paper only at the levels where the most recent executions took place.

Regulators have long since said increased investor knowledge through a tool such as TRACE can only be positive, arguing that retail investors should have as much information as institutional investors. Moreover, TRACE helps the NASD monitor the high-yield bond trading market, and the system has successfully helped NASD uncover mischief by investment banks.

Industry concern that publicly disseminated information could hurt liquidity has not come to pass, according to studies by the NASD. In fact, retail investors are responsible for 65% of corporate bond trades, though institutions still account for the bulk of the volume, NASD says.

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