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Benchmarking Distressed

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Exposure to distressed bonds is valued by investors in part because the situations tend to be idiosyncratic (and therefore uncorrelated to other risk assets). But as a group, distressed investments have a high correlation and beta to performing high yield bonds, so careful selection is critical to capturing outperformance and diversification. As a starting point, the most attractive returns are concentrated in the bonds that have already defaulted.

One of the most defining characteristics of the distressed bond market is the idiosyncratic nature of the opportunities. The diversity of ways that companies can fail means that it is even challenging to define what, exactly, constitutes a distressed asset. As a result, most funds that invest in the sector are not judged relative to any widely followed index. Nevertheless, we believe that there are insights to be gleaned from considering how a benchmark group of distressed assets has performed over time.

For our analysis, we assembled a market weight portfolio of all the distressed bonds we could identify. These included both performing names that were included in the US High Yield Index and defaulted bonds that had already left. The details of creating the benchmark are included in the section "Mechanics of Distressed Benchmarking" below.

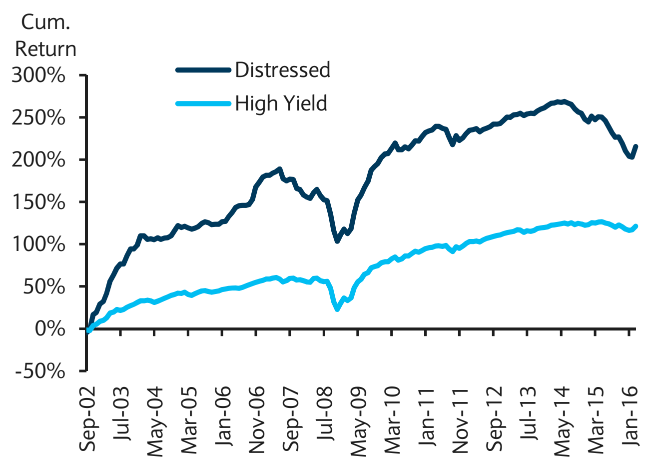
Aggregate Distressed Returns Are Mostly a Leveraged Version of High Yield, with a Little Equity Exposure for Good Measure

The benchmark allows us to make a few observations about the performance of distressed assets as a group:

Distressed bonds have typically generated higher total returns than regular high yield bonds (Figure 1) or equities. Since 2002, distressed has produced about a 16% annualized total return, versus close to 9% for each of the US High Yield Index and the S&P 500 index.

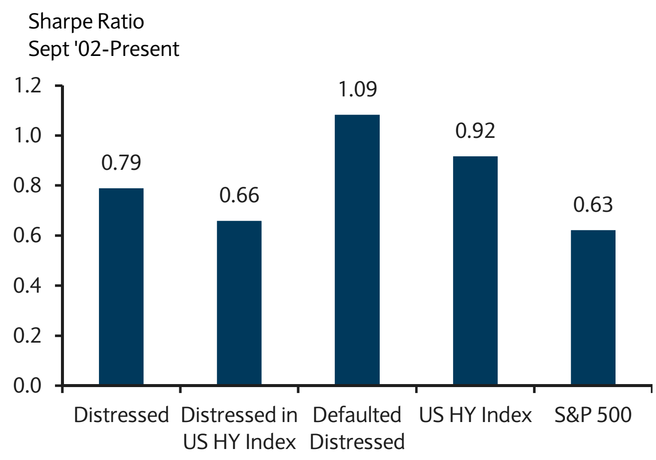
Although the return on distressed was higher, so was the risk of owning it. The Sharpe ratio for distressed was lower than the Sharpe ratio for US high yield (estimated as annualized total return/annualized standard deviation of total return), but slightly higher than for the S&P 500 (Figure 2).

FIGURE 1
Distressed Bonds Have Significant Beta to the US High Yield Index



Source: Barclays Research

FIGURE 2
Index-Eligible (Undefaulted) Distressed Bonds Had Lower Risk-Adjusted Returns

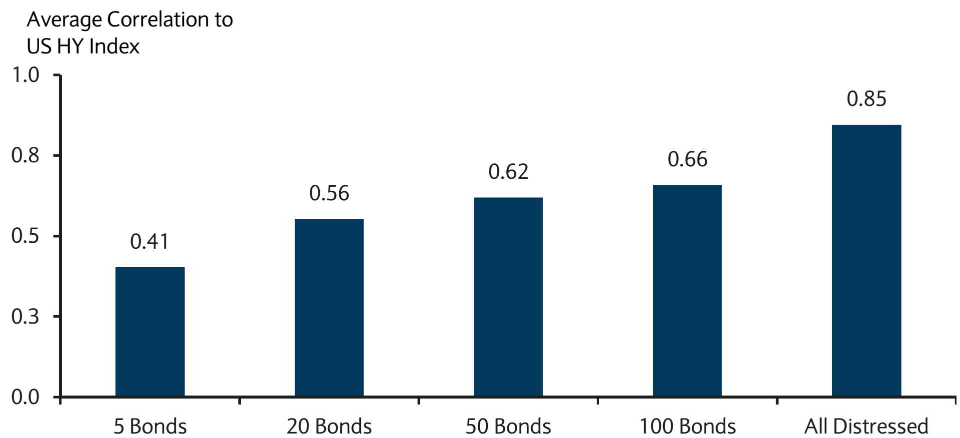


Source: Barclays Research

Although each distressed situation is unique, as a group, distressed bonds are mostly a high-beta version of high yield bonds, with an additional component of equity exposure. Our distressed benchmark has a statistically significant beta of 1.5 to the US High Yield Index, and in the median month, high yield explained about 70% of performance. Distressed also has a statistically significant relationship with equities (as measured by the S&P 500), which accounts for a median of just under 20% of the returns once the influence of high yield has been stripped out. That leaves only about 10% of the total return that can be explained by independent factors. The correlations are higher for bonds that remain in the index and lower for bonds that have already defaulted. This suggests some limits for investors that are considering distressed as a way to diversify into a less-correlated asset. While individual situations are likely to be less correlated, as the number of distressed positions in a portfolio increases, the correlation to indices seems to rise as well (Figure 3).

FIGURE 3

For Randomly Selected Portfolios of Distressed Bonds, Expected Correlation to US High Yield Index Rises with the Number of Different Bonds Held



Note: Average of 100 random draws. Source: Barclays Research

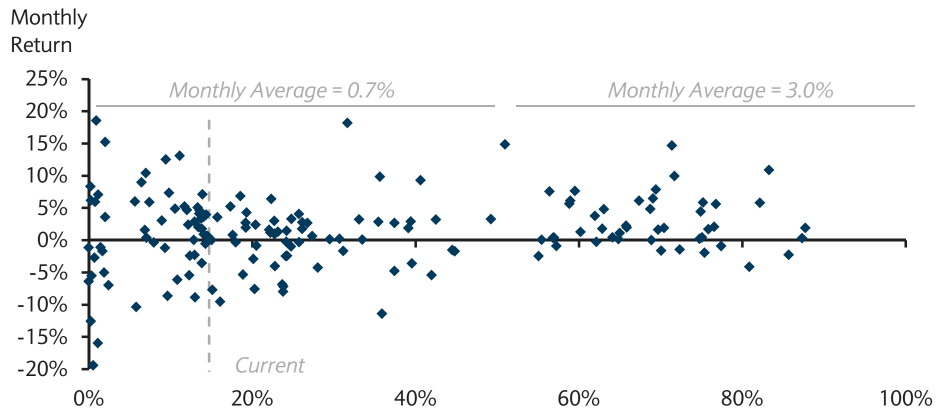
Distressed bonds that are performing (and remain index eligible) produced lower returns than bonds that have already defaulted. The average return on index-eligible distressed was 13.4% (with a Sharpe ratio of 0.66), compared with 34% for defaulted bonds (with a Sharpe ratio of 1.09).

One implication of undefaulted bonds' producing lower returns would be that the total distressed bond index should have higher returns when a higher share of bonds is in default. That does, in fact, seem to be the case (Figure 4). The relationship is noisy, but the distressed benchmark showed higher average returns – and fewer and smaller losses – in months when more of the distressed assets are not eligible for the US High Yield Index.

That is not entirely encouraging for current returns. As of the end of March, defaulted bonds make up about 15% of the distressed bond universe. Per Figure 4, that suggests a below-average expected return and an above- average chance of losing money. Of course, our index does not include the full universe of assets that might be owned by distressed investors. It excludes leveraged loans, closely held debt and equity instruments, assorted unsecured claims, DIP financing, equities of distressed or post-reorganization companies, and other post-restructuring assets. Nevertheless, we think this means that it is probably still too early in the current default/distressed cycle to see the best returns. Although the distressed universe has already been down as much as 20% since the peak, it may be a while before it makes it back.

FIGURE 4

As a Group, Distressed Bonds Outperform More Predictably When a Higher Share Has Already Defaulted



Source: Barclays Research

Anticipating Defaults Is the Key to Outperformance

Whatever the relative performance opportunity in distressed assets as a group, there is a clear lesson for picking specific situations. Based on our earlier work, we know that merely stressed assets (trading between 800-1200bp of OAS) tend to improve over the following year (see *It's Worth Getting Stressed*). Given the outperformance that our benchmark suggests for defaulted bonds, the worst spot is bonds that are directly on their way to default.

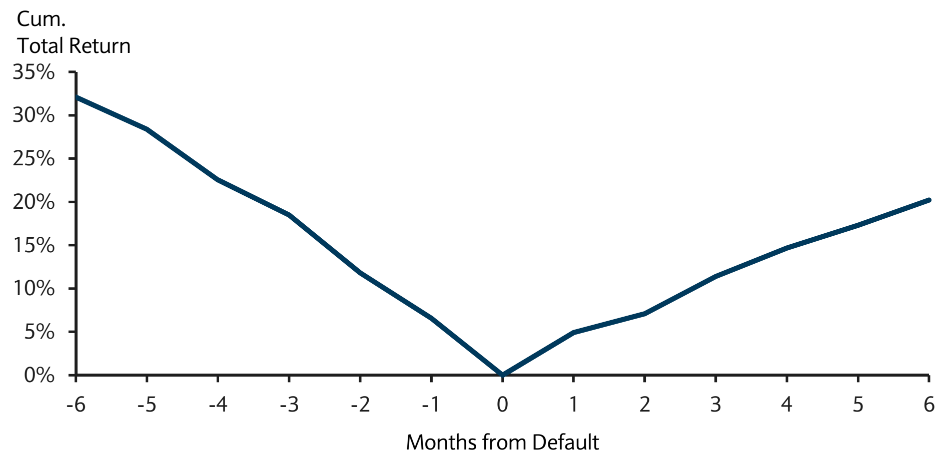
We see clearly in the data that bonds falling out of the US High Yield Index because of default have a performance pattern shaped much like that of fallen angels moving from investment grade to high yield (Figure 5), but with an even greater magnitude. Bonds lose an average of 30-35% in the six months leading up to default, but then rally 20% in the six months following.

So the trade implication is clear: avoid the most distressed names (those that have almost no prospect of avoiding restructuring) until after they formally default, and then buy them.

One of the challenges of implementing a strategy like this would be the difficulty of accumulating a position in bonds right around their default point. But given the magnitude of the benefits, we think investors can still improve their returns even if they accumulate bonds starting several months before an anticipated default, or for several months afterward. For names that have CDS contracts, participating in the second stage of a CDS auction can be a way to acquire the bonds in the month after default.

FIGURE 5

Underperformance of Distressed Bonds Is Concentrated in Those Approaching Default



Source: Barclays Research

The single-name implication is that investors are better off picking their longs from names that have most recently defaulted and their shorts from issuers that paid their last coupon, but are closest to default. We see two areas where defaults are likely to be concentrated in 2016: energy and retail.

Figure 6 shows two lists:

"Recently Defaulted Issuers" have defaulted since the end of February. These defaults include both bankruptcies and other events (such as a coercive debt exchange) that result in the bond receiving a rating of "D" from ratings agencies.

"Non-Defaulted Issuers" are all firms in the US High Yield Index that have not defaulted, but have at least one bond trading below $20 in dollar price, implying that that have a substantial chance of a near-term restructuring.

FIGURE 6

Recently Defaulted Issuers Defaulted since the end of February 2016, Non-Defaulted Issuers Remain in the US High Yield Index

Recently Defaulted Issuers	
Issuer	Market Value of Bonds ($mn)
Peabody Energy	$533
Linn Energy	496
CHC Helicopter	451
Ultra Petroleum	369
Midstates Petroleum	326
Penn Virginia	208
Berry Petroleum	203

Non-Defaulted Issuers with Lowest Priced Bond <$20		
Issuer	Price of Lowest Priced Bond	Market Value of Bonds ($mn)
Seventy Seven Energy	$4.0	$44
Breitburn	7.3	84
Comstock	15.0	134
Jones New York	15.0	102
WTI Offshore	15.8	142
Atlas Resource Partners	16.0	107
Tervita Corp	19.0	242
Claire's Stores	20.0	473

Source: Factset, Bloomberg, Barclays Research

Mechanics of Distressed Benchmarking

We generated our distressed bond benchmark using the following criteria:

OAS wider than 1000bp. We believe this is the most broadly accepted definition of distressed assets. It also makes sense from a practical level – bonds with those spreads are trading at about 50% or higher risk-neutral chance of default within five years (assuming the long-term average 40% recovery that has been observed in the high yield market).

Limited to corporate bonds that were at one point included in the US High Yield index. This is a simplification that improves the availability of price data. Key inclusion criteria for the index include at least $150mn face value of bonds outstanding, issued in US dollars, and rated below investment grade.

Our analysis excludes investment-grade rated bonds that trade wider than 1000bp, because of the high yield constraint. In our view, most of these have historically been bank or corporate hybrids. While in some cases these are genuinely distressed, in most of the situations we have seen, they reflect an OAS model that does not properly account for the likelihood of extension or call. While this will exclude some bonds that achieve real distress while still trading at investment grade ratings – for example, some metals & mining companies such as Freeport-McMoRan traded wider than 1000bp while still rated investment grade – these will be captured once ratings agencies catch up to the deterioration. One notable exclusion from our data is the bonds of Lehman Brothers, which were a significant component of the distressed universe for several years following 2008, but which we believe is not representative of the typical distressed universe.

We used two data sources for estimating pricing and returns. Barclays index pricing was used for bonds when they were still included in the US High Yield Index. After they had left the index because of default, we used Moody's defaulted bond index as the source for pricing. The benchmark returns were calculated monthly, weighting each bond's return by its market value at the beginning of each month. Because of data availability, we looked at performance of our benchmark only from the middle of 2002.

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