The Credit Markets on Barclays Live

18 December 2019

Price

EOD market price (bid side)

Yield

This is the standard yield-to-maturity of the bond calculated from full price. The yield-to-maturity assumes the same day count (usually 30/360) and compounding conventions as the bond. For a zero-coupon bond, annual compounding is used.

Yield-to-Worst

For this line, the maturity of the bond is set equal to the date for which yield is the lowest. The dates considered are the call dates, put dates and maturity.

OAS

The OAS is calculated using a discount curve selected by the user and the model volatility parameters on the trade date. Model volatility parameters are calibrated to closing levels of Libor/swap rates and swaption prices. If the parameters are not yet available for the trade date, those from the business day preceding the trade date are used. The OAS is based on continuous compounding using the actual/365.25 day count convention.

G-spread

The nominal spread over the matched interpolated point on the Treasury curve.

T-spread

The spread to the closest on-the-run benchmark bond. For USD instruments, six benchmark bonds are used for the entire maturity spectrum (2y, 3y, 5y, 7y, 10y, 30y). In the case of the 30y, we use the second most recently issued Treasury.

Z-Spread

Zero volatility spread to the Libor curve using the same day count/compounding conventions as the bond and ignoring optionality.

ASW

The rate relative to a floating index such as Libor that would be obtained if a fixed rate bond were converted to a floating rate asset.

Duration

Duration refers to the interest rate duration of the bond. It gives the percentage increase in the bond price per 100bp decrease in interest rates. The duration is calculated using the bond values arising when the swap rates are parallel shifted up 25bp and down 25bp. The BCDS spread curve is kept unchanged when the swap rates are shifted.

Mod Dur to Maturity

Measures the percent decrease in price for a 1% increase in yield.

Mod Dur to Worst

Measures the percent decrease in price for a 1% increase in yield, using yield to worst.

OAD

The option adjusted duration (OAD) of a bond gives the percentage increase in the bond price per 100bp decrease in interest rates. OAD is calculated as the difference between the bond values with the par yield curve shifted up 25bp and shifted down 25bp, divided by the full price of the bond.

$$\text{OAD} = -\frac{\text{Bond Value (Par yields increased 25bp) - Bond Value (Par yields decreased 25bp)}}{\text{50bp} \cdot \text{Full Price}}$$

In the formula above, Full Price = Bond Value (Par interest rates unchanged). The OAS is kept unchanged when the par yields are shifted.

For queries about the analytics or to arrange a demonstration of the tools available on Barclays Live, please reach out to BarclaysLiveSales@barclays.com

BCDS Spread

This is the bond-implied CDS spread. This spread has been calculated from the BCDS spread curve of the bond, which is the CDS curve shifted so that the model value of the bond is equal to the bond price specified in the calculator. The BCDS spread curve can be viewed by clicking the CDS tab to the right of the Basis tab.

Basis

The basis is a CDS spread minus the bond-implied CDS spread. For bonds without embedded options, the CDS spread is the spread used for the bond maturity based on the credit curve specified. For bonds with embedded options, the maturity of the CDS is chosen so that the CDS has the same expected life as the bond.

Spread Duration

The spread duration gives the percentage increase in the bond price per 100bp decrease in the BCDS spread. It is calculated using the bond values arising when the BCDS curve is parallel shifted up 5bp and down 5bp. The swap rates are kept unchanged when the BCDS curve is shifted.

Par Libor Spread

Difference between par coupon rate and par Libor yield

Par Treasury Spread

Difference between par coupon rate and par Treasury yield

Par Coupon

Coupon of a hypothetical bond of a given maturity that would trade at par if evaluated using the fitted survival curve

Survival Probability

Estimated risk-neutral survival probability to a given maturity

Hazard Rate

Forward instantaneous default probability

Bond-Implied CDS

Spread on a hypothetical CDS evaluated using the fitted survival curve

CDS Implied Bond Price (CDS Bond Px)

This is calculated in the same type of model as we use for pricing CDS (for callable bonds, an option pricing model is also used). The model takes an input of a default free discount factors from the Libor/swap curve, a curve of current market CDS spread quotes, and a recovery rate assumption. From these inputs, we can calculate the bond's model price.

CDS Spreads (bp)

The CDS spreads for the specified credit curve as of the source date. These are spreads to the standard CDS maturity dates (20 March, June, September and December) following the single-name CDS convention.

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