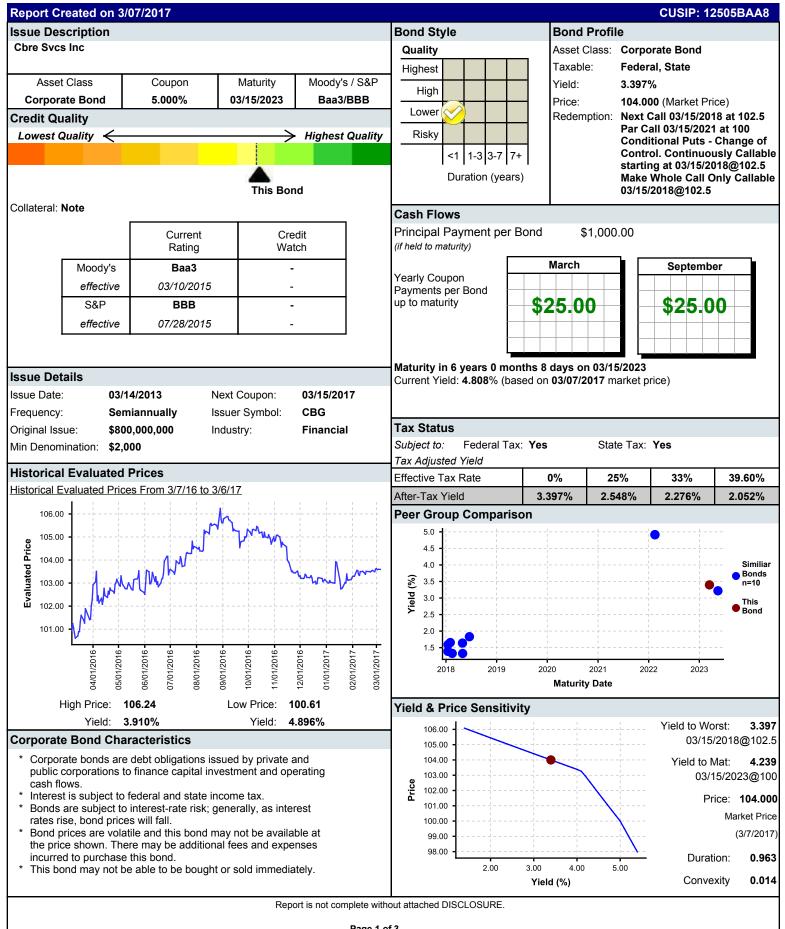
# Tradeweb direct >

## Cbre Svcs Inc



### Corporate Bond Factsheet Disclosure Statement & Glossary

The Individual Bond Factsheet is provided as additional sales material. All data is based on the most recent information available to Tradeweb Direct LLC.

Descriptive data for the issue is provided by Interactive Data Corporation. Bond ratings information is provided by Moody's Investors Service (Moody's) and Standard & Poor's (S&P). CUSIP numbers are provided by the CUSIP service bureau. Market prices are based on executable offerings on the Tradeweb Direct ATS. This material has been prepared by Tradeweb Direct LLC, a member of FINRA.

Tradeweb Direct LLC. All rights reserved. The information herein is not represented or warranted to be accurate, correct, complete or timely. Past performance is no guarantee of future results. Bond prices and yields are subject to change based upon market conditions. If securities are sold prior to maturity, you may receive more or less than your initial investment. This report is provided as additional sales material. If applicable, it may be accompanied by a prospectus or official statement and disclosure statement. The official statement is available online at www.sec.gov/edgar. shtml

#### Bond Style

The bond style grid depicts two key characteristics of the bond - duration and credit quality. Duration, a measure of bond price volatility, is shown on the horizontal axis. Credit quality (risky, lower, high, highest) is measured by commercial credit rating and plotted on the vertical axis. The credit quality of the issuer reflects its ability to pay a bond's obligation including

Credit Quality	Credit Rating
Highest	Aaa / AAA
High	A / A or Aa / AA
Lower	Baa / BBB
Risky	Lower than Baa / BBB

#### Quality

Moody's and S&P are recognized commercial credit rating companies. A bond that is rated Baa or higher by Moody's and BBB or higher by S&P is considered "Investment Grade". This designation is often a minimum rating incorporated into investment guidelines of individual and/or institutional portfolios. Creditworthiness measures may change resulting in a change in the assigned rating. Ratings are relative and subjective and are not absolute standards of quality. The security's credit rating does not eliminate risk. The highest rating given is Aaa by Moody's and AAA by S&P. Bonds rated lower than Baa/BBB may carry higher default probability. These bonds are referred to as "Speculative Grade". Additional scrutiny is suggested for "Speculative Grade" investments. Changes in economic conditions or other circumstances may adversely affect a speculative grade bond issuer's ability to make principal and interest payments. A credit watch indicates that an issue's credit rating is under review and may change. For additional information regarding credit ratings shown in this document please see:

<a href="http://www.moodys.com">http://www.moodys.com</a> and

<a href="http://www.standardandpoors.com">http://www.standardandpoors.com</a>

#### Cash Flows

The principal payment per bond shown only applies if the bond is held to maturity. If the bond is sold or called prior to maturity, the holder may receive more or less than the amount shown.

Current yield is the annual interest on a bond divided by its market price. The market price source is listed and may be either the current best offering price on the Tradeweb Direct ATS or an evaluated price.

#### Tax Status

Interest income may be subject to federal and state taxes as well as the alternative minimum tax. After-tax yields are computed for four sample tax rates: 0%, 25%, 33% and 39.6%. Actual after-tax yield will be different for different individuals depending on their tax situation.

#### Peer Group Comparison

The peer group comparison graphic plots the yield to worst versus maturity date for bonds in the selected bond's peer group. Peer group bonds are bonds deemed similar to the reference bond along the dimensions of maturity, coupon, credit rating, industry and asset class.

Dimension	Peer Group Bonds are:
Maturity (if < 1yr)	within + / - 3 months
Maturity (if 1-3yrs)	within + / - 1 year
Maturity (if > 3yrs)	within + / - 2 years
Coupon (if > 0%)	within + / - 0.5%
Coupon (if = 0%)	0% coupon
Credit Rating	in same rating category
Industry	in same industry
Asset Class	in same asset class
If callable	callable
If non-callable	non-callable

Only bonds for which executable offering prices are available at the time of creation of this report are eligible to be in the peer group.

#### Yield & Price Sensitivity

Yield is a measure of investment return. The yield to maturity is the internal rate of return; it captures the return an investor would earn if the bond was held to maturity and coupons were reinvested at the same rate. The yield to worst is the yield under the worst case scenario of early redemption.

Duration is the weighted maturity of a fixed-income investment's cash flows and is used in the estimation of the price sensitivity of a bond for a given change in interest rates. Bonds of similar duration will have similar price movements for a given move in interest rates. If a bond's duration is 4.5 years, the price of the bond will fall 4.5% for a 1% rise in interest rates.

Convexity is a measure of the change in a security's duration with respect to changes in interest rates. The more convex a security is, the more its duration will change with interest rate changes.

Yield, duration and convexity measures are computed with respect to the same bond price. The source of the bond price may be current market prices or a modeled evaluation price. The source price, source and date of that price are reported.

#### **Historical Evaluated Prices**

Historical evaluated prices are provided by Interactive Data Corp based on modeling techniques, market information and perceived market changes. These prices do not represent actual trade data and do not include the impact of fees or taxes. Bond prices are customarily quoted as a percentage of par. A bond price of 95.000 is equivalent to a dollar price of \$950.00 for a single bond with a face value of \$1,000.

#### **Investment Risk**

Bonds are subject to investment risk.

Bond prices are subject to change. As interest rates rise, bond prices will fall. Bonds are subject to availability and may not be able to be bought or sold. Some bonds may be called prior to maturity at the option of the issuer.

#### Glossary

Call - A provision giving the bond issuer the right, not the obligation, to redeem the bond prior to maturity at a specified price.

Collateral - Assets pledged until the loan is repaid. The assets are subject to seizure if the loan is in default.

Conditional Calls (Conditional Puts) - Event-driven situations under which a bond may be redeemed at the issuer's (holder's) option.

Coupon - Annual interest rate of the bond expressed as a percentage of the face value.

Extraordinary Call - Provision allowing the issuer to redeem the bonds prior to maturity due to a specified one-time occurrence such as a cancelled project or natural disaster.

Frequency - The periodicity of interest payments.

Industry- Business industry of the issuer.

Make Whole Call - A type of call provision allowing the issuer to pay off the remaining debt. The issuer must pay bondholders based on the net present value of all future coupon payments that would have been made. Bondholders are "made whole".

Mandatory Put - The requirement that the bondholder surrender the security to the issuer for purchase at a specified date and price.

Maturity - The date when the principal amount of the security becomes due and payable.

Next Coupon - The next date that bondholders will receive an interest payment.

Par Call - A call on a specified date at par, the face value of the bond.

Put - A provision giving the bondholder the right, not the obligation, to sell the bond back to the issuer prior to maturity at a specified price.

Sinking Fund - A fund where excess revenues are contributed by the issuer in order to retire the outstanding bonds in accordance with the sinking fund schedule. In the case of a Mandatory Sinking Fund, bonds will be called according to the schedule provided.