

## Bond Basics

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### Bond Basics: What Are Credit Default Swaps and How Do They Work?

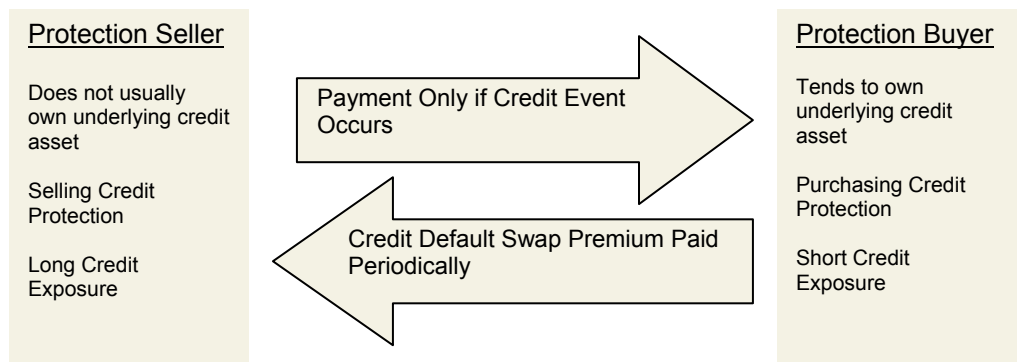
A credit default swap (CDS) is the most highly utilized type of credit derivative. In its most basic terms, a credit default swap is similar to an insurance contract, providing the buyer with protection against specific risks. Most often, corporate bond investors buy credit default swaps for protection against a default by the issuer of the corporate bond, but these flexible instruments can be used in many ways to customize exposure to corporate credit.

CDS contracts can mitigate risks in bond investing by transferring a given risk from one party to another without transferring the underlying bond or other credit asset. Prior to credit default swaps, there was no vehicle to transfer the risk of a default or other credit event, such as a downgrade, from one investor to another.

In a CDS, one party “sells” risk and the counterparty “buys” that risk. The “seller” of credit risk—who also tends to own the underlying credit asset—pays a periodic fee to the risk “buyer.” In return, the risk “buyer” agrees to pay the “seller” a set amount if there is a default (technically, a credit event). CDS are designed to cover many risks, including: defaults, bankruptcies and credit rating downgrades (For a more detailed list of CDS credit events see the Commonly Established CDS Credit Events table below).

The following graphic illustrates the credit default swap transaction between the risk “seller,” who is also the protection “buyer,” and the risk “buyer,” who is also the protection “seller.”

#### A Common Credit Default Swap Transaction



**Source:** *Credit Derivatives and Synthetic Structures*, John Wiley & Sons. 2001.

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### Characteristics of Credit Default Swaps

The credit default swap market is generally divided into three sectors: corporates, bank credits and emerging market sovereigns. CDS can reference a single credit or multiple credits. Multi-credit CDS can reference a custom portfolio of credits agreed upon by the buyer and seller, or a CDS index. The credits referenced in a CDS are known as “reference entities.” CDS range in maturity from one to 10 years although the five-year CDS is the most frequently traded.

Unlike total return swaps that provide protection against the loss of credit value irrespective of the cause, credit default swaps provide protection only against previously agreed upon credit events. Below are the most common credit events that trigger a payment from the risk “buyer” to the risk “seller” in a CDS.

#### Commonly Established CDS Credit Events

**Bankruptcy:** the reference entity becomes insolvent or is unable to pay its debts.

**Failure to Pay:** the reference entity fails to make interest or principal payments when due.

**Debt Restructuring:** the configuration of debt obligations is changed in such a way that the credit holder is unfavorably affected.

**Obligation Acceleration or Obligation Default:** the debt obligations of the issuer become due before their originally scheduled maturity date.

**Repudiation/Moratorium:** the issuer of the underlying bond (the reference entity) rejects their debt, effectively refusing to pay interest and principal.

The settlement terms of a CDS are determined when the CDS contract is written. The most common type of CDS involves exchanging bonds for their par value, although the settlement can also be in the form of a cash payment equal to the difference between the bonds’ market value and par value.

### How Has the Credit Default Swaps Market Evolved?

The CDS market was originally formed to provide banks with the means to transfer credit exposure and free up regulatory capital. As the credit default swaps market became more standardized and gained credibility, particularly following smooth credit event settlements in high profile cases such as WorldCom and Enron, more investors entered the market. While banks—through broker-dealers and reinsurance companies—are still both the largest buyers and sellers of credit default swaps, investment management firms are following closely.

Today, CDS have become the engine that drives the credit derivatives market. According to the British Bankers’ Association, the credit default swaps market currently represents over one-half of the global credit derivative market. The growth of the CDS

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market is due largely to CDS' flexibility as an active portfolio management tool with the ability to customize exposure to corporate credit. In addition to hedging event risk, the potential benefits of CDS include:

- A short positioning vehicle that does not require an initial cash outlay
- Access to maturity exposures not available in the cash market
- Access to credit risk not available in the cash market due to a limited supply of the underlying bonds
- Investments in foreign credits without currency risk
- The ability to effectively 'exit' credit positions in periods of low liquidity

The performance of credit default swaps, like that of corporate bonds, is closely related to changes in credit spreads. This sensitivity makes them an effective hedging tool that can assume exposure to changes in credit spreads as well as default risk. Credit default swaps also have given rise to new arbitrage opportunities, particularly in global markets that do not have the transparency or efficiency of the U.S. credit markets.

### Conclusion

The event risk embedded in bonds and other credit assets was very difficult to reduce prior to the evolution of credit default swaps. In the brief decade since their inception, credit default swaps have become not only a tool that effectively hedges event risk but also a flexible portfolio management tool that far exceeds that single benefit.

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**Past performance is no guarantee of future results.** Each sector of the bond market entails risk. Municipals may realize gains and may incur a tax liability from time to time. The guarantee on Treasuries, TIPS and Government Bonds is to the timely repayment of principal and interest, shares of a portfolio that invest in them are not guaranteed. Mortgage-backed securities are subject prepayment risk. With corporate bonds there is no assurance that issuers will meet their obligations. An investment in high-yield securities generally involves greater risk to principal than an investment in higher-rated bonds. Investing in non-U.S. securities may entail risk as a result of non-U.S. economic and political developments, which may be enhanced when investing in emerging markets.

The credit quality of a particular security or group of securities does not ensure the stability or safety of the overall portfolio.

Portfolios may use derivative instruments for hedging purposes or as part of the investment strategy. Use of these instruments may involve certain costs and risks such as liquidity risk, interest rate risk, market risk, credit risk, management risk and the risk that a portfolio could not close out a position when it would be most advantageous to do so. Portfolios investing in derivatives could lose more than the principal amount invested. Swaps are a type of derivative in which a privately negotiated agreement between two parties takes place to exchange or swap investment cash flows or assets at specified intervals in the future. There is no central exchange or market for swap transactions and therefore they are less liquid than exchange-traded instruments.

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