

EARLY-WARNING SYSTEM

MONITORING CDS SPREADS GIVES CORPORATE TREASURERS FAST FEEDBACK ABOUT CHANGES IN THEIR COUNTERPARTIES' CREDITWORTHINESS AND MORE TIME TO REACT, ARGUES JOHN CROUCH

A credit default swap (CDS) may be defined as a financial swap agreement between two parties, with the seller of the CDS compensating the buyer in the event of a 'credit event' (see Note below table). The agreement requires the buyer to make a series of payments to the seller for a specific time. These payments are known as the CDS 'coupon' or 'spread'.

A buyer and seller may use a CDS to speculate on the fortunes of a third party (the CDS is described as 'naked').

A CDS contract has typically a nominal amount of \$5m and a maturity of five years.

The 'credit event' includes default, and may include the events of missing a coupon payment, or restructuring the obligor to avoid default.

A CDS contract is an OTC derivative and the European Market and Infrastructure Regulation requires such contracts to be cleared and reported. Please refer to the briefing note published by the ACT at www.treasurers.org/otc

What is a fair price for a CDS contract?

The fair price of a CDS contract will depend on the creditworthiness (or riskiness)

A CDS HAS SIMILARITIES WITH INSURANCE, BECAUSE THE BUYER PAYS A PREMIUM, AND IS INSURED AGAINST LOSS IF AN EVENT OCCURS. BUT THERE ARE SEVERAL DIFFERENCES

CHARACTERISTIC	INSURANCE CONTRACT	CDS CONTRACT
Buyer typically covers	A unit of exposure (for example, one house, one life)	Can choose a fraction of exposure
Compensation in case of loss	Amount based on actual loss suffered	Amount (price per unit) set by market auction
Purpose	Hedging	Hedging or speculation
Settlement	In cash	In cash or physical delivery
Accounting treatment	Based on IFRS (GAAP)	Typically based on variation in mark to market
Resale	The seller of the policy can resell it later. The policy buyer cannot resell it	The owner of the CDS can resell via the active OTC market
Risk management	The seller sets up loss reserves	The seller makes margin payments, or offsets with other CDS deals

NOTE: A CDS CONTRACT IS LINKED TO A 'REFERENCE OBLIGOR'. THIS MAY BE A CORPORATION OR GOVERNMENT, AND IT MUST HAVE ISSUED DEBT

The treasurer does not need to participate in the CDS market - the spreads are readily available

of the reference obligor, the length of the contract and the details of the 'credit event'. There are two broad approaches.

The first, 'top-down' approach, assumes that the market is efficient, transparent and liquid, and participants remove any perceived arbitrage. Suppose a company buys a bond. There is a small chance that the bond will default, and the company will record a loss. It can insure against this default by buying

a CDS contract. The market alters the price of the contract until there is no difference on average between simply holding the bond (and recording the average loss) or holding the bond and the CDS contract.

The second, 'bottom-up' approach, equates the expected present value of the premium payments made by the buyer and the expected present value of the payments made by the seller. This approach makes

assumptions about the credit curve for the corporate, and it is not a trivial formula. In fact, prior to the financial crisis, major traders had proprietary variations of the formula. The market price was opaque to an end user such as a corporate treasurer. Post crisis, the CDS pricing was made standard and transparent. The International Swaps and Derivatives Association decides the current market price for the whole market.

A brief history of the users of CDSs

One of the first CDSs (in 1993) was to hedge bank exposure arising out of the *Exxon Valdis*



tanker spill. After the banks had convinced their regulators that such trades could reduce the amount of capital that a bank needed to hold against its credit risk, the market grew rapidly. In 1998, the estimated nominal size of contracts worldwide was \$300bn; in 2002, it was \$2 trillion; by the end of 2007, it was \$62.2 trillion.

The market in 2008 attracted several criticisms. It used instruments that were difficult to understand and speculators dominated market activity. The degree of interconnectivity between buyers and sellers could not be seen, and it was feared that these types of contracts posed a systemic risk to the financial system.

Following the banking crisis of 2008, some major changes were made in the CDS market, and facilities to clear through central counterparties (CCPs) were introduced. This reduced systemic risk since the CCP is between each buyer and seller. In 2011, the European Parliament acted against speculation and has banned naked CDSs on the debt for sovereign nations.

How corporate treasurers can use some properties of a CDS to monitor their exposures, even if they don't participate in it

A corporate treasury might typically hold FX forwards and deposits with counterparties. These introduce a credit risk to the company, so a treasurer will be attentive to any news about decreases in the creditworthiness of the counterparties.

The credit derivative markets have attracted a lot of criticism and they have undergone major changes to address risks to financial stability, transparency and liquidity

An important font of information will be the advice notes from the credit rating agencies. These consider many inputs (some private) and also have stability as an objective; they try to avoid making a rating change and then reversing it a short time later.

In addition, a treasurer might monitor the CDS spreads for the company's counterparties. The treasurer does not need to participate in the CDS market – the spreads are readily available, transparent and updated weekly. If the CDS spread has increased, the market is indicating that the counterparty has a lower creditworthiness. This weekly update occurs much more frequently than the agencies change their ratings.

The timings of movements of CDS spreads have been compared to rating downgrades

from the agencies. It has been found that for counterparties originally rated Baa, the adjusted CDS spread increased by an average of 35 points 60 days before the eventual rating downgrade.

Using CDS spreads can give the treasurer more information about creditworthiness, faster feedback of changes in creditworthiness – and more time to consider how to react.

The ethics of trading derivatives

The first derivative contracts in the 1800s were on the future price of wheat, and they allowed farmers to hedge their production. Their use by speculators was considered unethical and provoked controversy as millers believed the speculation distorted wheat prices.

In 2002, US investor Warren Buffett described derivatives as “...financial weapons of mass destruction” and said their use was unethical. But in specific cases, they are useful and Berkshire Hathaway has several, which act as hedges for the conglomerate.

Some hold that the ethics of a derivatives transaction depends on the use. For example, if a company uses a derivative with the aim of insuring its portfolio, this

behaviour is superior to using it for speculation.

A corporate treasurer might be concerned the CDS market is unethical, because speculators might cause the CDS spread to move in a manner unrelated to the fundamental creditworthiness of the company. The changes in the market post crisis – it has become more standard, open and transparent – make this kind of behaviour less profitable. Prices are clear across the market and this will limit the size of movement in the price. For if one group ‘pushes’ the price to a place that the market considers unjustified, another group will spot the arbitrage, enter and trade to take a profit out of the mispricing, bringing the price back into equilibrium.

The credit derivative markets are just 20 years old. They have attracted a lot of criticism and they have undergone major changes to address risks to financial stability, transparency and liquidity. It is plausible that (for the reasons outlined above) most corporate treasurers will not actively participate in the CDS market. But if a treasurer wishes to monitor the creditworthiness of a counterparty, the current CDS market can provide information that is timely and trustworthy. ♦



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