

The Association of Corporate Treasurers

Briefing note

Credit Default Swap based loan pricing

London, December 2008

TREASURY, RISK
AND FINANCE
PROFESSIONALS

ACT

NOTE

This briefing note does not constitute legal advice. It is written in general terms. Its application to specific situations will depend on the particular circumstances involved. In addition it does not attempt to include all points which might arise or be relevant in any particular case. Readers should therefore take professional advice. This guide should not be relied upon as a substitute for this advice. Although the ACT has taken all reasonable care in the preparation of this note, no responsibility is accepted by the ACT for any loss, however caused, occasioned to any person by reliance on it.

This briefing note may be freely quoted with acknowledgement

The Association of Corporate Treasurers

The ACT brings together finance professionals working in treasury, risk and corporate finance. Through the ACT we come together as practitioners, technical experts and educators in a range of disciplines that underpin the financial security and prosperity of an organisation.

The ACT defines and promotes best practice in treasury and makes representations to government, regulators and standard setters.

We are also the world's leading examining body for treasury, providing benchmark qualifications and continuing development through education, training, conferences, and publications, including *The Treasurer* magazine.

Our 3,500 members work widely in companies of all sizes through industry, commerce and professional service firms.

For further information visit www.treasurers.org.

Guidelines about our approach to policy and technical matters are available at <http://www.treasurers.org/technical/manifesto>.

This briefing note was drafted by The ACT's Policy and Technical Department (e-mail: technical@treasurers.org) and commented on by members of the Policy and Technical Committee and others to all of whom thanks are due.

ACT
51 Moorgate
London EC2R 6BH, UK
Telephone: 020 7847 2540
Fax: 020 7374 8744
Website: <http://www.treasurers.org>

Introduction

Some borrowers have agreed to the use of CDS prices (also called spreads) as a factor in loan pricing.

This note suggests some points for treasurers to consider before contemplating such a basis for loan pricing.

The appendix explains the basic principles of how a CDS works.

Summary

Borrowers are advised

- to recognise the nature of CDS prices/spreads
- to be cautious in using CDS based pricing, especially for lines which may be drawn
 - to consider, for example, a pricing grid (ratings or ratio driven pricing grid) with modest increments as an alternative

Where it seems CDS based pricing is either unavoidable or appropriate, probably for lines intended as standby lines and unlikely to be required to be drawn, borrowers will generally seek,

- not to accept CDS based loan pricing with the margin un-capped or with a formula which might increase the cost of debt by more than a modest amount
- to pay particular attention to
 - the fraction of CDS price/spread to be added to the rate index
 - the method of determining the CDS price to be used in the calculation
- to ensure that alternative pricing mechanisms are available if CDS prices are unavailable or seem to unreliable at any particular rate setting

The usual concerns of any company negotiating any loan still apply, of course.

Key points

In recent years as the CDS market developed, while volumes were often low, the bid-ask spread was usually narrow and sometimes large transactions were possible for CDS referencing some corporate obligations. Periods of low liquidity and high volatility were experienced from time to time for various corporate obligations. In more recent times as markets of many kinds have suffered from low, even very low, liquidity, the situation has deteriorated.

CDS prices are quoted in over the counter markets. Prices can be volatile and non-transparent and markets for particular securities may be illiquid. Prices provided to reporting networks can be nominal, not reflecting actual trades and not available for trading or available only for very small amounts.

Use of CDS based loan pricing with an un-capped margin exposes a borrower to uncontrollable, volatile and potentially very high costs not necessarily reflecting changes in its expected default risk or risk of loss given default (or the equivalent risk of the occurrence of a credit event under the CDS). Materially increased costs are likely to be unwelcome at any time, but all the more so if the increase in costs genuinely does reflect a weakening in the company's credit standing. And formula driven rate increases can add to the risk in interest or fixed charge cover ratio covenants.

The effects, referred to above, of accelerated decline in credit standing at the micro (firm) level, could, if such pricing models were widely used, accelerate problems at the meso (industry) and macro (whole economy) levels.

Prices in narrow markets are also subject to dramatic (upward) movements not related to changes in the reference obligor's credit standing but, for example, to the CDS buyers having been obliged to cover credit risks they had not expected because of the failure of other trading strategies, or in execution of some strategies associated with the company's equity. As investors are less likely to be obliged to go long of credit risk, CDS prices are subject to upward bias.

CDS markets, with prices effectively set by a very few dominant traders, may be subject to material effects from trading strategies of some investors.

For some companies, there can be problems with ascertaining CDS prices if there are no suitable obligations of the company to act as reference obligations with adequate liquidity (see "Other variations", below, page 3).

A borrower will wish to control the initial lending group and ensure that it will have strict control over sale of participations etc. by lenders. Lenders may be active in buying and selling CDS as part of normal making activities or to hedge a loan exposure before or during pricing periods and this can cause misunderstandings with borrowers over apparent distortions.

Classically banks have a number of functions including two important ones in this context:

- maturity transformation – turning deposits, mostly sight deposits, into medium term loans to commerce and industry
- delegated monitors of credit – relieving depositors of the burden of forming a view on the creditworthiness of borrowers

In forming their expert view of the credit standing of a borrower, banks will take account of many sources of information of which one is likely to be CDS pricing. They abandon one of their key *raison d'être*s if they use market debt pricing as a principal driver of charges for credit.

Company responses

Companies will be loath to allow pricing to change materially and uncontrollably during the life of a loan facility. At first glance banks may find use of a CDS driven formula attractive. Some companies may not be able to resist demands for a CDS driven formula, however. Others, able to negotiate a low cap and expecting their CDS to price low and declining may see advantage in CDS based pricing over a (higher) fixed margin.

Agreeing to an uncapped rate is likely to make the company more vulnerable if it nears financial distress and this effect may be expected to be a negative influence, even in good times, on credit ratings (which normally look for stability in rating, not possible accelerated loss of credit standing). Rating agencies will probably be concerned at any mechanism which may materially increase the cost of borrowing (material here being perhaps a couple of percentage points). They may disregard such facilities as sources of credit and/or may regard the increased cost potentials as adversely affecting future cash flows.

One can learn from the borrower and rating agency response to bank proposals for a pricing grid related to a company's credit rating a few years ago. Some companies agreed to defined and reasonable increments/decrements to loan pricing as ratings fall/rise (a "pricing grid"), but most higher-rated companies rejected this. Credit rating agencies continued to accept such facilities as effective liquidity although they did seek to charge for such use of ratings. At the other extreme, rating agencies rightly regarded a ratings trigger for default or constituting a "draw stop"¹ as materially jeopardising a company and so its rating.

Features of some early agreements using CDS pricing have recognised the unsatisfactory nature of CDS prices, making the margin over the index rate:

- some fraction, possibly a small fraction, of the CDS price and
- subject to a cap (and possibly with a floor too – making a collar – to cheer up the bank).

With a very low negotiated commitment fee on the undrawn line, this can be attractive.

CDS pricing may be less suitable for lines which are expected to be used.

Particular attention is necessary to the pricing period and method of determining the CDS price to use in the agreed formula and to what transparency there is around transactions in the relevant CDS.

Other variations

Lender spreads

We observe that in the United States the use of a formula including a margin linked to the sum of the borrower's and the lender's CDS spreads. The above comments apply to both of the CDS elements in the margin. Also, even to the extent that CDS spreads *do* reflect changes in the credit standing (both as regards risk of default and loss given default) of the reference obligations of the bank, the borrower has no control over the performance of the bank.

Spreads of similar companies or CDS indexes

As many companies do not have CDS trading in respect to their own obligations, banks have suggested linking to the CDS of another, "similar" company or a basket of such companies or a published CDS index. Of course the CDS aspects of our comments above apply but also now, again, the point that, to the extent that CDS spreads *do* reflect changes in the credit standing of the reference entity/ies, the borrower has no control over the performance of that/those company/ies.

Typically a basket or a CDS index is less volatile than an individual CDS and this may be seen as, to some extent, mitigating the dangers of CDS based loan pricing. Even to the extent this is so, careful choice of the reference basket or index would be important. Provisions for the unavailability of the necessary component prices is necessary.

¹ A "draw stop" is a provision in the loan terms which stops a borrower making or rolling over a drawing under a loan facility. An example would be where a company is unable to repeat as true a representation or warranty required to be reaffirmed on each drawing or roll over.

Appendix

Credit default swap (CDS) based loan pricing: How does it work?

CDS

In a CDS contract, the buyer receives protection in the form of a payoff from the seller if a specified credit instrument, commonly a loan or a bond, is affected by a specified “credit event” (the loan or bond goes into default, or the obligor or guarantor commits an act of bankruptcy or undertakes a restructuring, etc., as agreed between the parties) during the life of the contract – commonly 5 years.

As a CDS bought provides protection, a CDS sold provides exposure to the risk of buying the bond but without having to fully fund a bond purchase. In so far as the CDS price reflects the credit standing of the obligor of the reference obligation, as its credit improves, the cost of buying a CDS on the obligation falls, enabling the seller of the CDS to take a profit. And vice versa.

CDS prices are usually expressed as basis points per annum and the price is usually paid quarterly in advance by the buyer, ceasing when a specified credit event occurs. Prices are usually quoted as a bid and an offer.

Where the risk of default is considered very high, most of the price is paid at the outset and a smaller fixed premium is paid periodically. In this latter case, the CDS is said to be “trading upfront”. Eventually, as risk increases, there are no offers and the CDS on that obligation becomes unavailable.

CDS prices include the cost of the risk of default of the CDS counter-party. The same is true for interest rate swaps. The premium between the mid interest-swap rate and the underlying government security yield can be deducted from the CDS price to give a closer measure of the credit risk priced in to the CDS for the reference obligation relative to an assumed risk free security..

The relationship between CDS prices and bond prices in normal times was discussed in the Treasurer of May 2005 (available at <http://www.treasurers.org/node/1940>). (Under conditions such as in the current (December 2008) credit crunch/recession the zero arbitrage “axiom” as it is called in the article has not applied in most financial markets for some months.)

Floating rate loans

Floating rate loans are often priced at a premium above some index rate, for example BBA LIBOR.

In the case we are discussing, the premium to be applied to the index rate would be derived from the CDS price using an agreed formula. Where the CDS is trading upfront, the equivalent annual rate would be calculated for use in the agreed formula.

Normally the CDS price established is an average of the reported rates for a number of trading days prior to the rate setting. Detailed methodologies for the establishment of the CDS price for use in the formula and for calculating a fall-back rate in case CDS prices are unavailable is normally set out.

This page deliberately left blank

TREASURY, RISK
AND FINANCE
PROFESSIONALS

ACT

The ACT welcomes comments on this briefing note.

Please send your comments to technical@treasurers.org

Briefing note

Credit Default Swap based loan pricing

Version: First issued: December 2008

Revised: No revisions