

Fighting with volatility



Executive summary

- While pricing at a variable margin over Libor with the margin based on the credit default swap is no longer flavour of the month, it is still worth considering the pros and cons.

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EXPLORES CREDIT DEFAULT
SWAP-BASED LOAN PRICING.

At the tail end of 2008 the dislocations in the funding markets, which even affected the banks themselves, triggered a new concept in the pricing of lending to corporates – namely, the idea of pricing at a variable margin over Libor with the margin based on the credit default swap (CDS) spread. While this is no longer flavour of the month, it is still worth considering the pros and cons of such a basis for loan pricing. For most borrowers certainty on the credit margin is important while for others there may be a trade-off to be made to increase the supply of willing lenders. Some may expect their CDS price to be declining and therefore see an advantage in CDS-based pricing compared with a (higher) fixed margin.

THE CDS MARKET 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 uncapped 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 reflects 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 (company) level, could, if such pricing models were widely used, accelerate problems at the meso (industry) and macro (whole economy) levels. A wholesale move by lenders to go for CDS-related pricing would be pro-cyclical, which would not be popular with the financial stability team at the Bank of England.

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.

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.

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; and
- 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, one of which is likely to be CDS pricing. They abandon one of their key *raison d'être* 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, may find there are benefits.



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). The Standard & Poor's corporate criteria of 16 December 2008 (entitled Methodology and Assumptions: Analysis of corporates' swap-indexed bank lines) exclude CDS-linked facilities in the assessment of a company's liquidity resources unless the pricing is capped.

Without capping on margins, a credit line could become too expensive to use. S&P was concerned that if a line becomes too highly priced then in practical terms it ceases realistically to be available. Were a company to draw on a line at excessive margins, it would be signalling to the market that it was in difficulties, so this would act as a restraint on its actually using it.

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 (a provision in a loan agreement prohibiting new drawdowns in specified circumstances) as materially jeopardising a company and therefore 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, as was the case in the Nestlé standby facility, this can be attractive. CDS pricing may be less suitable for lines which are expected to be used.

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 are normally set out.

LENDER SPREADS In the US there have been examples of the use of a formula including a margin linked to the sum of the borrower's and 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 for 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. The CDS aspects of the comments above still apply but also, to the extent that CDS spreads do reflect changes in the credit standing of the reference entities, the borrower has no control over the performance of those companies.

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 so, careful choice of the reference basket or index would be important. Provisions for the unavailability of the necessary component prices are necessary. S&P says that it could retain a line as available liquidity if it is linked to an index since the volatility will be lower.

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How does CDS pricing work?

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, say, or the obligor or guarantor commits an act of bankruptcy or undertakes a restructuring, as agreed between the parties) during the life of the contract, commonly five years.

As a CDS bought provides protection, so a CDS sold provides exposure to the risk of buying the bond but without having to fully fund a bond purchase. Insofar as the CDS price reflects the credit standing of the obligor of the reference obligation, as its credit improves, so the cost of buying a CDS on the obligation falls, enabling the CDS seller 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. As risk increases, the offers dry up, and the CDS on that obligation becomes unavailable.