

# THE VANILLA EXPLOSION

ANDREW FEACHEM OF ABN AMRO HIGHLIGHTS SOME OF THE KEY THEMES IN WHAT HAS BEEN A STUNNING YEAR FOR CREDIT DERIVATIVES AND EXAMINES HOW COMPANIES ARE MAKING FULL USE OF THIS PRODUCT CLASS.

Since the publication of the International Swaps and Derivatives Association's (ISDA) Credit Derivative Definitions in 1999, the credit derivative market has boomed. The ISDA definitions provided the market with a generally accepted legal framework in which to operate, including rigorous definitions of 'credit events' and a highly simplified confirmation process for executing transactions. The result has been an almost total eradication of legal disputes and significant year-on-year growth in notional traded volumes of credit derivatives.

It has been only seven months since *The Treasurer* last highlighted the importance of credit derivatives for corporate users by making credit derivatives one of the subjects in its Spotlight section, but since then much has happened. In this article, we will discuss some of these developments and examine ways in which companies are using credit derivatives as a risk management tool. To begin with, though, here is a quick refresher to the building block of most credit derivatives, the credit default swap.

Credit default swaps (CDS) are bilateral OTC contracts that isolate an entities credit risk. The credit risks covered, defined as credit events, include bankruptcy, failure to pay and restructuring of borrowed money obligations – that is, bonds and loans.

In exchange for regular premium payments, the protection buyer transfers the credit risk of a reference entity to the protection seller. If the reference entity defaults, the protection seller will deliver to the buyer the notional value of the CDS contract, while the buyer will deliver to the seller defaulted obligations of the reference entity with a nominal face value equal to the notional of the CDS contract. With this hedge in place, the protection buyer is now no longer exposed to the credit risk of the reference entity. (See *Figure 1*)

**HIGHLIGHTS OF 2002.** Despite continued poor performance in the equity markets, high volatility in credit spreads and low liquidity in corporate bonds, market makers in plain vanilla CDS have experienced record trading volumes. The following goes some way in explaining the reason for this vanilla explosion.

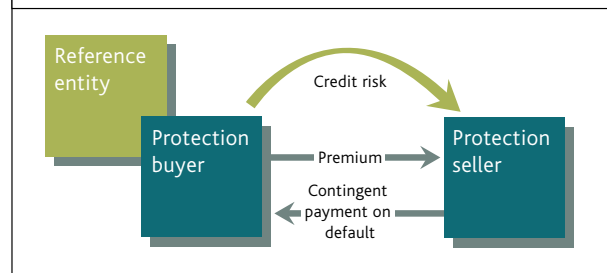
**THE EMERGENCE OF CREDIT INDEX PRODUCTS.** This year, investors have found it increasingly difficult to construct diversified

portfolios of credit risk. With the corporate bond market drying up to some extent, the process of diversification has proved to be costly and time-consuming. The credit derivative market responded by introducing credit index products such as ABN AMRO's iBoxx 50, JPMorgan's JECI and Morgan Stanley's Tracers. The emphasis on this product class is strong liquidity and a clean simple structure – that is, plain vanilla. The usage of these notes has been overwhelming, with an estimated notional traded volume over the past six months in excess of €10bn. The motivation has been liquidity and the ability to quickly and efficiently express a general long or short credit view. Look out for further developments in this area in 2003.

**A BASIS HISTORY.** In this context, basis refers to the spread differential between a CDS level and an asset-swapped equivalent cash transaction. For example, the difference between the five-year Ford Motor Credit CDS and the spread over swaps of a five-year Ford corporate bond. Where the CDS level is higher (wider) than the bond, this is known as 'positive basis'. Similarly, where the CDS is trading lower (tighter) than the bond, this is known as 'negative basis'.

Negative basis opportunities allow investors the possibility of buying a bond and matching CDS protection in order to lock in positive cashflows. Consequently, negative basis trades are rather

FIGURE 1  
CREDIT DEFAULT SWAP



## SIEMENS FINANCIAL SERVICES (SFS) REAPING BENEFITS FROM USING CREDIT DERIVATIVES

**Siemens  
Financial Services**

Partner in creating value.

My department, Equipment & Sales Financing (ESF), offers trade finance services (factoring, forfeiting, leasing) for internal and external customers. Since July 2000 ESF has used the credit derivatives market for portfolio and risk management purposes (no active credit trading or investing).

It does this by using credit default swaps (CDS) exclusively. The objective is to hedge some of the credit risk in its trade finance book (accounts receivables, leasing receivables and the like) to optimise the book's credit profile and to increase operational flexibility.

Most of its assets are short-term receivables with a maximum maturity of 180 days, with about a third being of longer term. As these simple payment obligations are unusual assets for an instrument as a default swap, it took the department considerable time and effort – also tapping external legal expertise – to amend the standard documentation so it would work effectively. The main difference is that SFS does not use the market standard 'borrowed money' (covering bonds and loans), but 'payment' (including also trade finance obligations such as receivables).

Its document is still based on the ISDA standard, and SFS prefers to carry out physically settled or cash-settled trades, depending on the specific case. In principle, physical settlement is the preferred route.

Typically, ESF would look to buy protection on the short end of the credit curve (between six months and two years).

**WHY CREDIT DERIVATIVES?** SFS was fascinated by the opportunities arising when crossing over from one segment of the financial markets to another, which offered the firm a new risk management tool besides credit insurance and forfeiting, and new counterparties to work with.

It believes each of the aforementioned is a useful instrument and that they should be applied in parallel, depending on the job at hand. Obviously, at this stage, credit derivatives will mainly work with international debtors holding an external rating and also issuing in the bond market, but the instrument may gradually be used in a broader context in the future. SFS has also closed trades where the underlying was a subsidiary of a company with no separate rating and no outstanding public debt.

SFS is one of the first financial services companies that leverages the full business potential of credit derivatives for corporate risk management purposes, which required pioneering work with its main counterparties, international banks with a credit derivative operation.

**Ralf Lierow**, Director, Portfolio Management Europe, Equipment & Sales Financing, Siemens Financial Services

less common than positive basis trades, where investors can achieve significant yield enhancement by using credit derivatives instead of buying the equivalent bond. Over the past seven months this positive basis has been particularly wide, encouraging many investors to switch from bond to credit derivatives. An explanation for this recent trend in positive basis is that, in times of illiquidity in the bond market, the focus shifts to CDS to express negative (short) credit views.

Therefore, with more participants going short credit by buying CDS, as opposed to shorting the bonds (which has proven to be expensive), we have seen the CDS level widen compared with equivalent bonds.

Other interesting observations include that the basis is not only volatile but also closely correlated to general credit levels. *Figure 2* illustrates the basis between the portfolio of CDS represented in the iBoxx 50 Note and a portfolio of equivalent corporate bonds.

**FURTHER DEVELOPMENTS IN DOCUMENTATION.** The ISDA has been working continuously to further improve the legal framework surrounding credit derivatives. The key advances are incorporated in the soon-to-be-released 2002 Credit Derivatives Definitions. This new document is viewed by the market to be the stepping stone towards a futures style contract and credit derivative products traded as futures contracts are expected during 2003.

There has also been much debate over the definition and incorporation of the restructuring credit event in CDS contracts. The market consensus has been overwhelming that dropping restructuring will dramatically increase liquidity.

Unfortunately, we will have to wait until the financial regulators agree that trading without restructuring will give financial institutions solvency relief before this market can really take off.

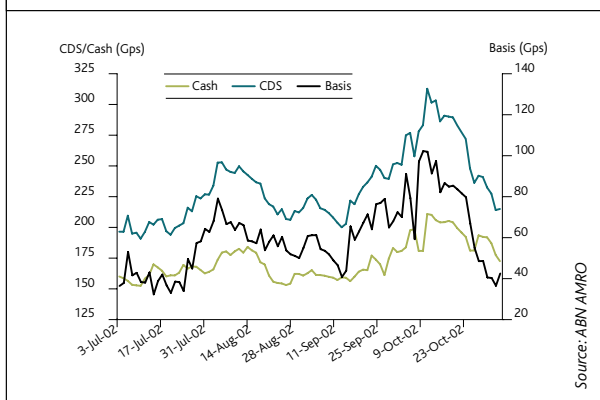
**CORPORATE USAGE OF CREDIT DERIVATIVES.** A survey published by the British Bankers Association (BBA) in September 2002 indicates that credit derivative volumes have increased four-fold since 1999. While the absolute volumes of credit derivatives traded by companies has also risen, the report shows that, as a proportion of the total market, corporate usage for risk management purposes has declined.

Meanwhile, there has been a proportional increase in companies selling protection in order to take advantage of positive basis opportunities in their investment portfolios. The statistic from the risk management perspective is somewhat disappointing. Companies take on credit risk as part of their day-to-day business in the form of trade receivables, however, using credit derivatives to manage this risk has not really taken off. A possible explanation is that CDS does not precisely hedge the credit risk on trade receivables.

Under ISDA rules, a trade receivable is known as a 'payment obligation', whereas the risks covered under the standard contract are borrowed money obligations (for example, bonds and loans). So, in theory, it is possible that there is a default on a trade receivable and the CDS contract does not pay out. The risk of this occurrence is low and the risk manager can gain further comfort from the fact that if there is a default on a trade receivable they can sue for bankruptcy, which (if successful) will trigger payment on the CDS.

It is important to note that despite this proportional decline, absolute volumes of CDS traded by corporates for risk management purposes has almost tripled since 1999. The following are several ways in which corporates may have used credit derivatives for risk management purposes.

**FIGURE 2**  
CDS VS CASH AND BASIS OF iBoxx 50



Source: ABN AMRO

**TABLE 1**  
CORPORATE USAGE AS % OF TOTAL DERIVATIVES MARKET.

	Buy protection	Sell protection
End 1999	6%	3%
End 2001	4%	5%

Source: British Bankers Association

**‘DESPITE THE PROPORTIONAL REDUCTION IN CREDIT DERIVATIVE USE FOR RISK MANAGEMENT PURPOSES BY COMPANIES OVER THE PAST FEW YEARS, ABN AMRO EXPECTS A TURNAROUND NEXT YEAR’**

**PROPERTY DEVELOPMENT COMPANY.** Property companies take credit risk on their tenants. In cases where the property company has agreed to build a new property for a tenant for future occupancy the risk, especially in these times, are far higher.

A recent example is the case of Enron Europe’s occupancy of a Grosvenor Estates building in London. Enron’s European headquarters were completed in 2000 and taken up for a 25-year lease. At the time of occupancy, Enron’s five-year CDS level was at 85 basis points per annum.

In November 2001, Enron Europe went into administration and vacated the building in early 2002. It took a further five months for the first new tenants to move in, which represents lost rental income to Grosvenor Estates. A sensible hedge would have been to buy rolling five-year CDS protection with a nominal amount sufficient to cover about six months’ rental income.

**BUSINESS CONTINUITY RISK.** Putting all your eggs in one basket is as dangerous for businesses as it is for investment managers. Many companies experience the 80/20 concept where 80% of business is derived from 20% of your trading partners. If these trading partners fail, how easily can they be replaced?

The classic example is of US fast food distributor AmeriServe which filed for Chapter 11 in January 2000. AmeriServe was by far the single largest supplier to US fast food chains such as Burger King. With their bankruptcy these fast food companies found themselves having to prop up the company, as the alternative was to have empty shelves in their stores. It took several months to organise other suppliers and the cost to the fast food industry was high. Although it is hard to quantify the financial impact of a business partner failing under these circumstances, prudence dictates implementing a credit hedge while diversifying your supplier base.

**ENERGY/PULP & PAPER COMPANIES.** Part of many companies day-to-day treasury activities will include hedging commodities risk (such as oil, gas, electricity and paper) on a forward basis. Where this activity is frequent, as with energy companies, the counterparty credit risk that builds up can be substantial.

If we take the case of the energy sector, volatility on the underlying contracts can be high. So on long-term deals (three to 10 years), the mark to market exposure can become substantial and often warrants taking out additional cover with CDS. Energy companies have been active users of credit derivatives for the past couple of years to hedge these exposures, citing two major reasons:

- where the CDS is liquid, it is easy for the risk manager to buy and sell the appropriate amount of protection to cover the mark to market value of the underlying contracts; and
- CDS are black and white. What you see is what you get. The alternatives are credit insurance and letters of credit, which, although displaying many positive points, are more cumbersome to execute.

**A BRIGHT FUTURE.** The trends in the development of the credit derivatives market are clear. The product class is here to stay with an ever increasing audience actively participating in the market.

Despite the proportional reduction in credit derivative use for risk management purposes by companies over the past few years, ABN AMRO expects a turnaround next year. With greater liquidity offered in a wider range of entities and continued stream lining of the documentation, there are few barriers to entry.

ABN AMRO also expects to see continued use of credit derivatives by treasurers for investment and money management purposes. Credit linked notes (CLNs) are funded forms of CDS and are essentially synthetic bonds that can offer an investor a highly tailored risk profile (maturity, rating, sector, currency and the like). Companies have taken advantage of CLNs this year to enhance yields and in some cases have bought CLNs on their own name. It must be noted that for own name CLNs there may be regulatory, legal and/or accounting reasons that will prevent them from executing the deal.

A way to overcome this obstacle might be to buy a CLN, referencing your closest competitor. The deal is naturally hedged – if the entity does not default, you will receive the coupon for the life of the contract. If the entity does default, you will lose money on the CLN, but you will be compensated through increased market share. The opportunities are endless.

Andrew Feachem, Credit Derivatives Marketing, Global Financial Markets, ABN AMRO.  
andrew.feachem@uk.abnamro.com  
www.abnamro.com