

INSOL Europe Technical Series

Comparative and International Insolvency Law Central Themes and Thoughts

Papers from the Honours Class 'Comparative and International Insolvency Law',  
organised at Leiden Law School, the Netherlands,  
March – June 2009.

**ANTHON VERWEIJ LL.M.**

*PhD fellow Centre for Business Studies, Leiden Law School*

and

**PROFESSOR BOB WESSELS**

*Professor of International Insolvency Law, Leiden Law School*

*Editors*

INSOL EUROPE  
Nottingham · Paris

*7. Credit Derivatives in International Insolvency*

Janis Sarra

Reporters: Arnela Colo and Armelle Lodé

Page 53-58

## 7. Credit Derivatives in International Insolvency

Janis Sarra

Reporters: Arnela Colo and Armelle Lodé

### *Credit default swaps*

The credit derivative market was almost non-existent fifteen years ago. Considering that this market is now worth USD 70 trillion, it is safe to say that it has experienced tremendous growth since its inception. Credit derivatives are structured financial products that were originally designed to manage the risk exposure of banks. In this respect, credit derivatives have been very useful and productive financial instruments.

I want to give a very practical example of a credit default swap, the most common derivatives product, for those of you who have not run into these products before. I will use Armelle and Barbara in order to illustrate. Let us assume that Armelle wants to start a company. She comes to the bank requesting to borrow USD 50 million. The bank decides that she is creditworthy and has a good business plan, and lends this money to her. In order to manage the credit risk, the bank might purchase a credit derivative product such as a credit default swap (CDS). The CDS might be purchased from Barbara, a derivatives dealer, for USD 50 million. So, as a result, the bank has hedged the credit risk of Armelle's loan by purchasing a credit default swap in the market. This CDS benefits the bank in reducing its risk that Armelle will default on the loan, but it also benefits other parties because it frees up that capital for re-investment in other viable businesses. This transaction is the simplest form of what a CDS entails. It brings economic benefits to all parties involved.

Such derivatives instruments were developed in a very benign economic environment; not the one that we are living in today, in May 2009. Therefore it is important to understand that these products were not tested under any kind of market strain. Moreover, it is not the single transaction that is problematic, but rather, the multiple transactions on the same underlying business, called a "reference entity". In our example, Barbara would probably have sold a part of her CDS exposure on to other parties, either through further CDS or through securitized loans or other derivatives products. As a result, the original CDS instrument would have spread out in layered tranches in the market because each party is hedging his, her or its own risk. It can create particular issues of agency costs and negative externalities.

In my view, the structure and nature of these products creates tensions between the competing public policy objectives of encouraging financial markets and ensuring insolvency protection. Insolvency law in most jurisdictions offers an efficient mechanism to either liquidate assets of a financially distressed business for alternative use, or to restructure a business so that it can continue as a viable entity. Therefore, an effective insolvency law regime continues to create economic value by preserving jobs and trade supply relationships. Derivatives markets differ in that while they encourage the movement of capital, they are not interested in long term value promotion or preservation of economic activity. So on one hand, we have the goals of insolvency law and on the other, we have the goal of liquid capital markets.

There are numerous kinds of credit derivative products. Most common by far are the CDS, but credit derivatives also include collateralised debt obligations (CDO), including, asset backed commercial paper and the notorious sub-prime mortgages that were instrumental in creating the current financial situation in the United States. Canada did not have a sub-prime mortgage problem, but it did experience an asset-backed

commercial paper market crisis. Essentially, the ACBP crisis involved the same problem of debt being collateralised and dependent on a high degree of liquidity and turnover of the paper. A serious lack of liquidity in the markets generally when the US sub-prime mortgage crisis commenced essentially caused the Canadian ABCP market to collapse.

CDO were created to facilitate the flow of capital. Although there are many kinds of CDO, in a cash flow-based CDO, the lending entity has a special purpose vehicle, which issues its own structured financial products. Basically it resells that debt in various tranches of risk. In the US sub-prime market, the debt was sold in various tranches of increasing risk, without anyone paying attention to how risky these tranches really were, because they were interested only in the short-term, high returns. It was a bit like a house of cards. The financial instruments looked good on paper with proper risk and return allocation, but lacked transparency in respect of the underlying loans and assets and the ability of the market to properly price the products. People were purchasing products that they thought were highly secure while in fact they were not secure at all. This development caused a crisis in the US around the sub-prime mortgages. In Canada, there was a CAD 36 million crisis with its asset-backed commercial paper market; the difference between the US and the Canadian crises was that Canadian insolvency law was utilized to successfully restructure the ABCP market.

CDS comprise approximately three quarters of the market in derivatives. They can be targeted at the creditworthiness of one entity or they can be more synthetic and targeted at a bundle of risks. One of the most significant features of CDS is that they are not like insurance, in the sense that the value of the CDS does not have to be related to the reference entity or the business of the asset. To go back to our simplified example, Professor Wessels and Anthon could be counterparties in the market that are purchasing and selling CDS against the risk of Armelle's business failing, but they are not parties to any loan or other economic relationship with her business. So, in fact they have no economic interest. They could have purchased USD 100 million of CDS against the risk of her business failing through multiple non-transparent transactions, and if her business fails, would reap the benefit of many times the value of the underlying business. This activity is the speculative side of the market. The bank that lent her business the money in the first place might decide to double-hedge its risk. So, for example, the bank gives Armelle's business a loan of USD 50 million, but sells CDS to a number of counterparties amounting to USD 100 million. Now the economic incentives are different; not only is the bank fully hedged and has managed its risk, but it may be in the bank's interest to have Armelle's business fail as it would be paid out double the value of its original loan. This over-hedging is what happened in the market over time, and in fact, still occurs today in the CDS market.

In this course, you have talked about the relationship between creditors and debtor companies, in terms of what their rights are. Creditors generally have a bundle of rights, such as repayment of the terms of the loan or credit, interest and fees. Secured creditors often have self-help remedies to realize on their claims. When a company becomes financially distressed, creditors generally have certain default control rights. Once a company enters into insolvency proceedings in most jurisdictions in the world, creditors have some voice about what is going to happen to that company, whether it is going to be liquidated or whether it is going to be restructured. Some jurisdictions, as I am sure you have studied, are much more pro-liquidation, others are more pro-restructuring. Almost all of them have at least some mixture of avenues or options to remedy the financial distress of the firm. When one thinks about these options, one thinks about creditors having these default control rights as a result of their direct economic interest in the insolvency company. In the classic paradigm, as a lender to Armelle's business, the bank with a secured loan has the right to receive the USD 50 million that it lent to her and fixed additional costs such as fees and interest. The fees and interest reflect compensation for the risk of default of the original loan. However, if the bank purchased multiple CDS or has collateralized the debt, then it has fully covered its risk or even over-hedged, and

may have little interest in whether the business is a success or failure. Previously, the bank had strong incentives to negotiate with the insolvent company to find a viable strategy to address the insolvency of the business as it was interested in an on-going financial relationship if the business continued. Now, there are competing incentives in terms of the bank's short-term or long-term profit-maximizing horizon.

If for some reason Armelle's business plan did not work, she would either file for insolvency or restructuring proceedings, which are both referred to as credit events in derivatives documents. This filing would trigger the settlement of all CDS. The aim of her restructuring proceedings would be to negotiate with creditors, find a viable business plan, compromise claims and come out of the process with a going forward business. Unfortunately, by filing for restructuring, a cascading set of settlements of derivatives in multiples has been triggered, shifting the dynamic of the negotiations, as I will talk about in a moment.

In finishing my introduction to this subject, I would like to come back to the comparison with insurance companies. An insurance company would never, if Armelle's business was worth USD 50 million, give insurance of USD 100 million. Such an amount of insurance would be an incentive for her to set fire to the business as she could get more money than the business was worth. Whereas insurance is directly connected to the value of potential loss, quite the opposite is true for CDS.

### *Changes in the market environment*

What happened to the market that was originally supposed to bring financial benefits to all parties involved? The first thing is that the banks, the big financial institutions, had the vast majority of the market, both on the buyers' and sellers' side. After 2002, the bank portion of this market dropped and the hedge fund portion of the market grew substantially to more than a third of the market. Hedge funds have a shorter time horizon as their accountability to their principals is different because of pressure to show profits in the short term. The traditional institutional lenders look more for an ongoing lending relationship, something that cannot about most hedge funds. Therefore, the shift in the market towards a more short-term horizon, driven by hedge fund involvement, was a significant change.

The second significant change, resulting from the first one, is that most derivatives products at the outset were rated 'AAA' and 'AA' instruments in terms of their credit rating. Almost none were below investment grade. From 2002 to 2006, there was a reversal in this trend and most of the instruments were below investment grade, with only a minority of them rated 'AA' or 'AAA'. The margins were squeezed and the hedge funds were looking for a better spread, which caused the pressure downwards in the ratings and the proliferation of higher risk products. Hence, the inherent risks of these products had grown significantly. Many purchasers of these products did not appreciate this change in credit rating. CDS were issued in multiples of values of the underlying reference entities, and again, there was no transparency in the market such that counterparties understood that many of the CDS issued could not be settled should a credit event occur.

There are almost no governments that truly regulate credit derivatives. The lack of any regulatory oversight likely has contributed to the fact that this market was able to collapse so fully. Most sophisticated parties in this market were aware of the situation, but they hedged their own credit risk through a series of structured financial products. Many purchasers, however, were not aware of the risk they were exposing themselves to. Many participants seriously lacked information. Even low risk takers, such as municipalities, school boards and farmers, invested in these products, because they were advised that these financial products were safe. The misinformation, poor credit ratings and lack of transparency were all possible because of the lack of regulatory oversight.

On the protection-seller side, there is no obligation to inform the buyer that the seller has an insolvency risk. Consider AIG, for instance, which sold its protection right up until the

moment that it was at serious financial risk. Also in the case of Fanny May, Bear Stearns and many other companies, there was a lack of transparency about their ability to settle derivatives.

In a normal bilateral contract between a lender and a borrower, parties bargain all kinds of covenants and other protections in the contract. This negotiation does not take place in the case of most CDS transactions. The usual checks and balances between lender and borrower are non-existent.

In the course of time, inappropriate incentives were created that resulted in the agency problem. The lender was less careful and less duly diligent before lending money to a company, because the lender was certain of getting its investment back by securitizing that investment. Given that the large lenders were fully hedged, or in some cases, over-hedged, there was no incentive to focus on a restructuring as the outcome of the borrower's future financial distress. Consequently, the development of these products has extremely eroded the relationship between lender and borrower.

### *Improving market conditions*

What was the role of credit rating agencies? Credit rating agencies certainly contributed significantly to the dynamics of these markets. In North America and some other parts of the world, credit rating agencies are paid by the companies that they rate. In the US, firms are subject to legislation that requires them to use only selected credit rating agencies and so there has been no competitive market for effective credit ratings. In turn, the credit rating agencies had no incentive to develop appropriate evaluation tools to rate derivatives products and the valuation methodology was outdated. Moreover, the fee structure, which is a direct fee from the companies that they rate, created incentives to misrepresent the risk and return associated with products being sold in the market. Normally there are checks and balances that would ensure that there is not too much conflict of interest. In this case, with these products being developed so rapidly and were so complex, that it was just easier for the agencies to give the products high ratings. There was an unhealthy alliance between the companies offering structured financial products and the agencies encouraging their development through the ratings. At some point, the agencies adjusted their ratings somewhat, but it was far too late, especially for less sophisticated lenders. The rating agencies are an important part of this whole puzzle.

Traditionally, credit relationships were able to create positive "externalities"; specifically, institutional lenders such as banks would decide that a company was creditworthy, and other less sophisticated market players could rely on the banks' assessment of the company. They could rely on the fact that the bank would negotiate covenants and would monitor the financial health of the company in order to protect its investment. Hence the bank's relationship with the company served as a type of signalling to unsecured creditors that did not have the information or resources to monitor the company that they could continue to offer their credit. With the development of derivatives products, due diligence was conducted less often because the banks and other secured lenders had hedged their risk, and these positive externalities disappeared and negative externalities were created. Other parties were not aware that the banks were hedged. The banks were sometimes now signalling misinformation about the company they invested in.

When a firm becomes insolvent, in the classic scenario, every party wants to maximize creditor value using the insolvency tools that the law of that specific jurisdiction is offering. Often, maximizing value means finding a restructuring plan that allows the business to continue. What happens now is that stakeholders no longer necessarily share this common goal. Owners of CDS have perhaps an incentive to see the business fail because of the amount they have hedged. To use our simplified example again, when the business is financially healthy, the hedged bank lender will likely get its loan of USD 50 million back, but if it fails, it can receive an even greater return of USD 100 million from settlement of the CDS. Thus the traditional notion that creditors want to maximize value

is changed by the fact that there are different kinds of economic risks at stake than with the previous system of direct credit. While unsecured creditors have the value of the goods or services that they gave on credit at risk, the more sophisticated parties may actually not have any economic risk because they have hedged that risk through derivatives products. The example here of a single-swap situation is over-simplified; in reality, CDS run in multiples, and there are often thousands of undisclosed CDS concerning just one company. So usually it is not even known directly how many CDS settlements an insolvency triggers.

What are the possible solutions to the problems raised?

Primarily a shift in transparency is desirable. Transparency in the market would slow down the speculative side of the market and would encourage the risk management parts of the market. Transparency would require national legislators to make a set of rules that would make the protection buyers disclose more information about the state of their business. The protection sellers would then be in a better position to price the risk properly. Signals to the market would be more accurate because the security would be properly priced. Protection sellers should also be required to disclose to counterparties whether they face an insolvency risk in selling the products. This transparency and disclosure would benefit all parties involved and stabilize the structured financial market. There is also a need for transparency for the developers of new financial products. If there was an obligation to disclose how high the material risk of a product is, this obligation would go a long way towards slowing down the speculative side of the market and ensure that counterparties understand the real risks and returns potentially associated with the products. Finally, investors should have meaningful remedies for violation of these obligations. If there is a misrepresentation, they should be able to have a means to seek compensation for losses associated.

Other recommendations could include, requiring institutions to leave a portion of their risk on the balance sheet, which would help to make them more accountable for their lending decisions. One could also set a price for participating in the market on a transaction-to-transaction basis. A fund could be created to protect investors from particular kinds of harms.

There are also recommendations that would assist in problems created by the settlement of CDS in insolvency proceedings. Many jurisdictions have recognized that restructuring plans are a positive potential outcome of firm financial distress. CDS that settle during an insolvency proceeding may negatively affect the ability of the insolvent company to develop a viable going-forward business plan acceptable to its creditors. There are two types of CDS settlements: physical settlements and cash settlements. When a credit event triggers the settlement of a CDS, a physical settlement is where the creditor holding a CDS makes a claim to the counterparty and on payment of the amount owed, transfers the claim. Thus the protection seller under the CDS becomes a new creditor of the insolvent company. Over many transactions, the insolvent companies may have hundreds of new creditors with whom it had no previous relationship, yet it is trying to persuade them to support a restructuring plan. Often, the insolvent company is no longer able to track who exactly its creditors are, in order to be able to negotiate a viable workout plan.

Cash settlement is where the creditor that has purchased a CDS receives payment to settle the CDS but retains the claim against the company with the original loan. So the creditor has fully recovered its loan exposure, but still holds a claim in the insolvency proceeding. It has no economic interest left, yet it is still considered a creditor of the company with full voting rights. Yet the insolvent company, the other creditors and the court are not aware that there is no economic risk. CDS are not stayed during insolvency proceedings in most, if not all, jurisdictions, and there is no obligation to disclose that the claim has been fully hedged.

Creditors of an insolvent company should be required to disclose if their interest is a pure legal one or an economic one. The other parties, the debtor company and the court can then react in a more appropriate and meaningful way in the negotiations for a workout. Public policy discussion is necessary on the reasons why there is no mandatory stay of

CDS or transparency of economic claims once insolvency proceedings are opened. Another issue is that of the revolving door of CDS settlements that the debtor company has to deal with. It is necessary to set a timely claims bar date, so that the insolvent company does not need to bargain with parties that are continually changing with the settlement of CDS.

One possible medium-term solution is the creation of a central counterparty clearing facility for multiple credit derivatives. The clearing facility can impose capital adequacy requirements on counterparties clearing on the facilities, thus ensuring the liquidity to settle derivatives when a company fails. By serving as a clearing facility, it reduces settlement risks and can provide greater certainty to the market. The clearing facility could assist in stabilizing the market; however, such a strategy requires regulatory oversight of disclosure and settlement standards. More generally, there is a need for a broader public policy debate on the appropriate role of derivatives and the extent to which private markets and public regulators should govern their activities in the market. These are just a few recommendations that would be a step towards a fair and sustainable derivative market, and thus towards achieving a fair and sustainable capital market as a whole.