

**Stoll Financial Corp.**  
Consultants, Brokers and Agents  
**...a financial engineering approach**

129 North West 13th Street, Suite D-26  
Boca Raton, FL 33432  
(561) 367-9111 (800) 950-9112 Fax:(561) 367-7312

September 2008

Dear Friends:

These are historic and difficult times. The economy and the financial world are in a state of flux, this can appear scary and that fear is amplified by the news media to perhaps unhealthy levels.

I have put together the attached report on Credit Default Swaps and what may have happened to AIG. It includes some facts and some opinion.

I hope you find it entertaining and informative. I will try to continue to keep you up to date as to what I think is happening and what it will mean to all of us.

Charles Stoll

# The Perfect Financial Storm

## How Credit Default Swaps Destroyed Trillions of Dollars in Wealth

Note: Credit Default Swaps (CDS) are very esoteric, and while the following description is believed by the author to be conceptually accurate, it is not a primer on how to trade CDSs or how to understand how they will specifically react or affect the stability or viability of any financial institution. Some comments are meant to be tongue in cheek, and in no way suggest that CDSs should be part of your portfolio. Consider this discussion to be part education and part entertainment. And that itself is sad, that any part of a CDS could be considered “entertaining;” another sign of the times!

Until a few months ago, few people outside of Wall Street were even aware of Credit Default Swaps. Now it seems every newscaster is mentioning them; for the most part they are calling them “credit derivatives” or “complicated financial instruments.” In the recent past they are usually discussed along with the death of a major financial institution, notably AIG.

Let me explain what they are:

Suppose you own a home, and want to offset the risk that it will burn down, as most of us do. The typical way of doing that is to buy an insurance policy that protects you against the loss you would suffer if the house burned down. For this protection you would pay a premium each year. If the insurance company had a lot of fires in your state, over time the premium would go up; if it had few fires, the premium might go down. This is pretty simple to understand.

Credit Default Swaps are similar with a few exceptions.

Suppose instead of a house you owned \$10,000,000 in bonds issued, say, by Acme Finance, a fictional company, but let’s assume it’s a leading and well-rated financial institution, and you wanted to make sure that you did not lose money on those bonds if the company went broke. You might go into the CDS market and make a deal with an insurance company that goes something like this:

You (the owner of the bonds) pay a premium of, say, 3% of the face amount of the bonds each year for 4 years to the insurance company.

The insurance company promises to SWAP (trade places) with you if Acme Finance files bankruptcy, becomes insolvent, or defaults on the bonds or other loan agreements. In

such a case the insurance company would give you \$10,000,000 in cash, and you would give the insurance company your bonds.

Hence, if Acme Finance gets into trouble, you get your money back, and the insurance company gets the bonds and gets to keep the premiums. This is an easy and clean transaction for you. You pay a premium, and if there is a problem, you get your money back.

Of course, there must be a third party to the transaction. Even though you are a trusting person this is a lot of money and you want someone somewhere to hold some collateral, to make sure that the promise that is being made to you will be kept.

How much collateral will be held? That's the big question.

If your insurance company is a large, famous financial institution with AAA credit ratings and the best possible reputation, then you might not require a lot of collateral, maybe only a few percentage points. If, however, the insurance company is small and not so famous you may want more. Further, if the insurance company that is standing behind the promise starts to get into trouble you would want the collateral increased, just as any reasonable person would. Maybe you negotiate a schedule like this:

If the insurance company is rated AAA: 3% of face amount to be held by third party  
If the insurance company is rated AA: 7% of face amount to be held by third party  
If the insurance company is rated A: 15% of face amount to be held by third party  
If the insurance company is rated BBB: 25% of the face amount to be held by third party.

This means that if your insurance company, (the one protecting your bonds), has a credit rating of AA then they must deposit 7%, or \$700,000, with a third party to back up their promise to you. They still own that collateral; it's just held as security for the promises made to you in the credit default swap. If a few weeks later their credit rating goes up to AAA, then they get back \$400,000, leaving the remaining 3%, or \$300,000, behind. If, on the other hand, their credit rating goes down, they need to bring their collateral up to 15%, or \$1,500,000, and that means depositing another \$800,000 in collateral. Collateral might be stocks, bonds, or negotiable securities, but generally consists of things that can be valued and sold easily

It makes sense, in that if you pay a premium you want to know that the insurance company can pay the claim. For your homeowner's insurance you have your state government checking them out and it usually has a backup fund to protect you. However, this is not so with credit default swaps. So, as your insurance company's ratings change, the amount of collateral they have to deposit changes. Again, they still own the collateral, it is just held as security to make good on their promise to you.

This all make a lot of sense: the counterparty is making a promise to you to protect you against the default of your Acme Finance, and you pay them 3% a year for this

protection. You have reduced your risk on the investment, and the insurance company might make some good money if Acme Finance does not default, and will end up owning its bonds and giving you your cash back if Acme Finance does default.

Of course all the terms and conditions are negotiated between the parties, but the above example is representative of the structure of these deals.

These CDSs have been around for quite some time but have grown in popularity over the past ten or so years. Here's why:

The "insurance companies" love them. By the way, you don't have to be an insurance company to issue a Credit Default Swap. Anyone can do that, as it takes no special license and there is no regulation of the market. If someone will buy your credit default swap, you can sell it.

For the insurance company or others that sell them, (together known as "counterparties") this is, in normal times an amazingly profitable business. They use their credit ratings to make promises and collect what amounts to huge premiums with little or no costs (assuming that Acme Finance doesn't default). They don't need agents, local offices, filings with state governments and all the things that make the insurance business expensive. They can have 5 guys on a Credit Default Desk make deals all day long and bring in BILLIONS in annual revenue.

All this works well, until it doesn't.

A few years ago the insurance companies, including major brokers, and financial institutions, started finding new uses for these instruments.

- 1) They starting writing credit default swaps on AAA rated pools of mortgages. Figuring that if Standard and Poor's thought the mortgage backed security was AAA, how could they be wrong?
- 2) They started writing them to people who didn't own the bonds. Suppose you wanted to bet that GM was going to default on its bonds. You pay the insurance company a premium say 5% a year (it's a lot higher now), so \$500,000 on \$10,000,000. When GM defaults you get the \$10,000,000 less what it costs you to buy the defaulted bonds in the market to swap for the money. You have made a highly leveraged bet on the default of GM.
- 3) Also, they sold them to others for hedging reasons. Suppose you are building a \$1 billion plant for GM in Brazil and you are concerned that GM might default on the amounts it owes and no completion or surety bond is available. A CDS might help you offset the risk

- 4) They stated re-trading them. So one company would buy the CDS from the insurance company, then resell it to another company at a profit, or sell part of it off to other people like speculators.

For speculators (hedge funds?) a Credit Default Swap is a highly leveraged way to profit from a company or debt obligation going bad.

So here we are; that is what a Credit Default Swap is and what it was designed to do and why the insurance and financial companies would want to sell them (massive profits) and why people would want to buy them (either a genuine hedge or speculation).

It used to be a small market but in recent years this market has grown due to the new uses and the new risks and the insatiable appetite of the insurance financial companies for profits and the desire of the speculators for the leverage.

Flash forward to the recent case of AIG. The figures I am using are made up; I don't know if they even know the correct ones, and that was part of the problem. Some of the facts come to me from the news media, others I have filled in what appears reasonable to explain what appears to have happened.

### **The Case of AIG**

AIG had written credit default swaps on about \$550 billion of securities. If they were collecting 5% of that in premium that means about \$27 billion a year in cash, just leveraging off of their great credit rating. It's easy to see how that might get out of control. Of course AIG, with the highest credit ratings, didn't have to post much collateral so this looked like an easy way to use their size (\$1 trillion) to really boost profitably for the shareholders. All was going along well.

Sure they had some losses, as the mortgage bonds that Standard and Poor's had rated AAA started to tumble and fail, but they had that \$27 billion in cash flow, and even with a few losses the future was bright for this arm of the business. The good news was, and this is funny in hindsight, (like hurricanes hitting the US a few years back), that because there had been losses, the prices of the CDSs had gone up, and hence, for the years to come they could make even more money. What a great business!

In the years to come the particulars of the story will become known, but probably they will go as I describe below, but first a bit of history that is relevant here.

The great stock market crash in 1929 that led to the great depression was believed to be started by one of the most famous short sellers of all time, Jesse Livermore. (A short seller is a person who thinks a stock is going down in value, and even though they don't own it, they sell it and buy it back later when it's lower and make a profit.) Jesse Livermore saw what he thought was coming and shorted the market and made a killing, all the while making the crash a lot worse than it otherwise could have been. (To learn

more, read his story Reminiscences of a Stock Operator; clients of mine may call my office to borrow a copy.)

In the aftermath of that crash, the stock exchange instituted two new rules:

1) A short seller had to find someone to borrow the stock from in order to sell it. In other words, they sold someone else's stock that they had borrowed. Before the crash, the short sellers could largely sell stock they didn't have, which gave them an inexhaustible supply. From then until recently, a person was limited in the amount of stock they could sell short.

2) A person could only sell short on an uptick. This means that someone has to be paying up for the stock you are selling. (For Example if a stock is trading at 15 and it's last move was down from 15.01, then the short seller could not sell it until someone was willing to pay 15.01, again, hence the name "uptick") So, if you were trying to force the price of the stock down you couldn't just sell it at any price, you had to wait until someone was willing to buy it on an uptick; hence, you as a short seller were limited as to how quickly and at what prices you could sell. This slowed that process down.

In mid 2007, our own Securities and Exchange Commission removed the uptick rule so that short sellers, should they want to, could sell stock all day long. It has been argued that the rule #1 above against naked short sellers (people selling who didn't first borrow) was being ignored; the short sellers deny that now of course. Time will bring us the truth.

So here we sit, with a huge company like AIG with \$550 billion in credit default swaps out, with collateral based upon their excellent credit rating and the short sellers having the ability to pummel the stock without waiting for an uptick.

This certainly is a "perfect storm" for the largest insurance company in the world.

I believe the process for its failure goes like this:

Some well-heeled hedge funds start shorting the stock and forcing the price down; they can do that because of a generally soft market, concerns over credit crunch, debt crisis, economic slow down here and abroad and so forth. The stock starts falling. As it does, more short sellers come in to help.

Then the hedge funds go into the credit default markets and start buying the credit default swaps on AIG's debt. AIG had sold insurance (\$550 billion) that protected other companies' debt but now, from other insurance companies, people were buying insurance that AIG would fail.

And they kept shorting the stock, pushing it down, and buying the credit default swaps, forcing them higher in price. They needed lots of money to do this.

In time the rating agencies, S&P and Moody's, (yes, the very same ones that issued the AAA ratings on all the mortgage backed securities that are giving everyone such losses these days) noticed that the CDSs were going up in value and the stock was going down. To them, a lower stock price means it's harder to sell new stock if you need equity; I think they are right about that.

The rating agencies, in a lucid moment, figured out that if the company got in trouble that they would have to post a lot of additional collateral to back up the \$550 billion of credit default swaps. The rating agencies figured something must be going on for the stock to be going down and the CDSs to be going up. So they issued a news release that they were looking at AIG and might downgrade them.

Of course as we learned above, a downgrade is exactly what it would take to put the company in the direct path of the perfect storm because that alone is what triggered the need for the additional collateral to be posted.

How much collateral? It appears that the company itself was unsure; it started out at \$20 billion, the rescue was for \$85 billion less than a week later. That's a lot of coin.

So the short sellers and the CDS buyers convinced the rating agencies to make AIG come up with \$85 billion in collateral, basically overnight. AIG couldn't do that and a great company and huge taxpayer is now owned 80% by the treasury. What a mess!

I guess the credit agencies realized that if they lowered the credit rating of AIG that they would be put at risk, so they lowered the credit rating because of the risk that if they did, the company would get in trouble. I think this is called circular reasoning, and given their prior apparent misdeeds on ratings of the mortgage backed securities, it gives me pause as to who they are really working for, because they sure aren't working for AIG, or its shareholders. Perhaps they are working for its bondholders, but the action of the rating agencies put them at risk too; as no federal bailout was promised, the bondholders could have been out a bunch of cash also. So who do they work for?

Maybe time will prove that my little tale above is true, perhaps not. Maybe the fall of AIG was not a concerted effort, or maybe the effort wasn't intended to cause the fall, rather just to make a few bucks shorting the stock. Time will tell.

Heck, I am still waiting to find out who killed Kennedy.

I think we know a few things:

This is all about greed. Greed for corporate earnings, greed for profits on short sales, greed on the part of all of Wall Street to create exotic instruments they can trade.

It's also about a perfect set of events happening just at the right time:

- 1) Housing and mortgage collapse

- 2) Debt and credit crisis
- 3) The rating agencies fumbling the ball pretty well on the rating of the mortgage backed securities, and thereby trashing the earnings of a lot of Wall Street firms and financial institutions around the world. After all, if you think you are buying gold and it turns out to be hay, it gets ugly fast.
- 4) The SEC changing the uptick rule and, we think, ignoring the naked short selling rule.
- 5) The inherent design of the CDS contract that allowed the collateral to be based on the ratings of the issuing company, and for that collateral to be modified over time.
- 6) A large concentration of capital in largely unregulated hedge funds that have the function, resources and know how on how to pull this off. Further there is another theory that the hedge fund have siphoned off much of the risk management talent from Wall Street and corporate America.
- 7) As for AIG alone, I will go so far as to say, the removal of Hank Greenberg (thanks Elliot Spitzer, you got yours didn't you?) who built the company and would probably not have allowed this to happen, but that is an assumption on my part.

In similar ways this storm took out Bear Sterns, Lehman Brothers, Freddie Mac and Fannie Mae, and countless banks across the US. Many tens of thousands have lost their life savings in banks or in employer stock (AIG, Lehman, Freddy, Fannie) and market losses, not to mention their homes, as this storm and its remnants continue to change Wall Street, Main Street and the financial markets worldwide.

All in all, it is a perfect financial storm, with a lot of people being to blame in just the right order.

Sitting in my seat, I am in constant awe that no one (apparently) saw this coming that could stop it. Not the heads of the largest and smartest financial institutions in the world, including, I think, our own Federal Reserve and Treasury. Not even Goldman Sachs; heavens!

The real culprit I believe is GREED. In a month or two, watch for my new book, The Lottery Gene. In it I describe the universal tendency of the human being for this type of self-defeating behavior, and explain what can be done about it.

Two final points:

I think that these financial institutions have a responsibility to the infrastructure/society that we all operate in, and those that would destroy that infrastructure as I suggest above, without proof? I wish for them the same end that came to that famous short seller I discussed above, Jessie Livermore, who by all accounts came to his end in the early 1930's in a men's room of a New York steakhouse, by his own hand. I guess what goes around comes around, right Elliott?

Lastly, Warren Buffett, in 2003, directed his insurance company, Berkshire Hathaway, to get out of the CDS market. He referred to them as "Time Bombs" and "Weapons of Mass Destruction" – Have we been looking in the wrong place for WMDs?

These are my thoughts and opinions, some supported by fact, others not so much.

Charles Stoll