

Where did it all go wrong?

A year is a long time for CPDOs and their holders who 12 months ago thought they were in investment nirvana. Instead, today they find themselves in an invidious position. Do they hang on to a hope that a discredited structure will eventually make up its losses? Or do they sell out now to avoid losing nearly everything? Felix Salmon, a strong proponent of the structure last year, questions his, and others, assumptions.

This time last year, in the debut issue of *American Securitization*, I wrote an article headlined “The unsung beauty of CPDOs.” Just look at these clever structured products, I said. Know-nothing grinchers might kvetch, but the real losers were “US and Canadian investors who are looking across the pond and wondering why they, too, haven’t been offered the opportunity to get triple-A certainty along with a tasty spread over Libor.”

Well, we all know how that one turned out. The know-nothing grinchers are looking very smug these days, while the investors who were denied access to these wonderfully named constant proportion debt obligations are feeling like they dodged the very bullets that the investors who did buy CPDOs are busy sweating. In September, research firm CreditSights put out a report with the headline “Distressed CPDOs: We’re Doomed!”, and in November a CPDO structured by UBS was unwound, leaving investors with losses of roughly 90%.

The really crazy thing is that the credits that the CPDOs wrote protection on haven’t defaulted. Anybody who simply bought a basket of investment-grade bonds will have seen his investment fall a little in value and all of his coupons will have been paid in full.

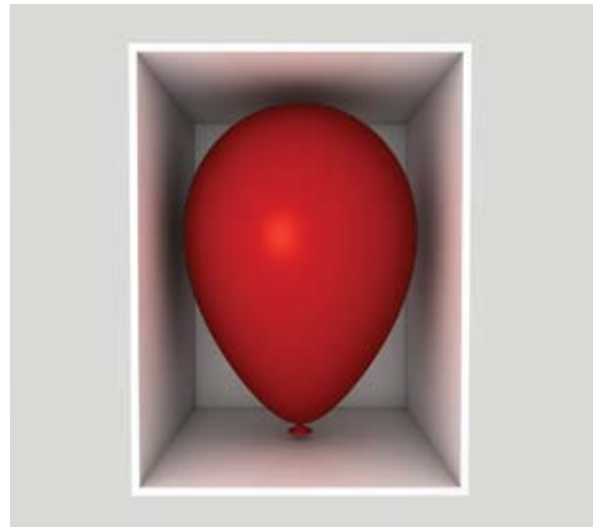
CPDOs weren’t even exposed to

risky securities like subprime mortgage bonds; they bought the credit of companies which were reluctant to lever up during the era of cheap debt. If any structured product was going to survive a credit crunch, the first bet would have been the CDPO.

So what went wrong? Did things play out as the critics of CPDOs said they would? And where, in hindsight, were the holes in my analysis?

The UBS-sponsored CPDO unwound because of a very simple and obvious fact: it did not follow the rules. It was not a typical CPDO because it did not invest in a basket of 250 credits from a widely diversified range of industries. Instead, it invested only in the debt of financial companies. But it was highly levered. So when the credit crunch hit and the debt of financial companies gapped out, the CPDO’s equity was obliterated. At 15x leverage, financial credit default spreads only needed to widen to about 170 basis points in order for the portfolio to lose 90% of its value — the point at which a CPDO has to be unwound.

In the two days before November’s



The credit crisis has put CPDOs back in the box

unwind, credit default swaps on Bear Stearns rose 27bp to 177bp.

As recently as two months before being unwound, the UBS CPDO carried a triple-A rating. Luckily for many investors, only €11.5 million of the obligations remained in private hands. The other €41 million had already been bought back and cancelled.

The fact that the UBS CPDO even got a triple-A rating in the first place, however, let alone retained that rating through the summer’s chaos, speaks volumes about arguably the single most important weakness of the CPDO structure: the ratings agencies.

As spreads tightened in 2006, it

became harder to structure attractive CPDOs no matter how great their initial leverage. That ought, one might think, to have put an end to them. After all, it's hardly unusual for profitable financial innovation to be arbitrated away.

But that's not what happened: instead, UBS issued a CPDO without the underlying diversification, and Moody's signed off on it. Moody's was a great choice to rate the structure, since it's well known that the agency considers banks and other financial institutions to be much less likely to default than their spreads would indicate. After all, at the beginning of 2007 it was Moody's who famously gave triple-A ratings to three Icelandic banks, claiming that the sovereign would always bail the banks out if they fell into any difficulties.

So where did the ratings agencies err? Mainly in their frequentist approach to probabilities, under which if something has never happened in the past, it can't happen in the future. In this case, the unprecedented event was a nationwide drop in housing prices — something which had hardly gone unforecast. But because it hadn't happened in the ratings agencies' datasets, it couldn't easily be modeled, nor could a probability be associated with it.

Then there was the whole question of liquidity. Trying to explain how CPDOs could yield so much if they had so little risk, I wrote last year that "CPDOs have much more mark-to-market volatility, and they have much less, if any, liquidity. Both affect pricing."

That was true, but it was a bit silly. Illiquidity is a bug, not a feature: investment banks don't deliberately make structured products illiquid in an attempt to boost their yields.

CPDOs are not securities, and they never had any price discovery on any exchange. Brandeis University professor Stephen Cecchetti proposes that as much financial trading as possible take place on an exchange, which would do wonders for transparency if not for liquidity. That proposal would have set a market-clearing price for CPDOs at the outset. When the only bid in the market comes from

the person who sold you the product in the first place, you have to have far more confidence in your own analytical abilities than it is reasonable to expect any risk-averse triple-A investor to have.

The single biggest oversight I made last year, however, and the thing responsible for the overwhelming majority of CPDO downgrades, was something known as roll dynamics.

CPDOs roll every six months: they unwind the credit protection they wrote half a year ago, and write new protection on the current index. Because the cur-

How can credit protection for 60 months cost less than credit protection for 54 months? It's all to do with index composition.

rent index is longer-dated than the old index, it normally trades wider than the old index, which gives the CPDO extra income. If the new index trades inside the old index, there can be a problem.

I was well aware of that: "Since a company is less likely to default in the next 54 months than it is in the next 60 months, the CPDO makes a small profit on the trade," I wrote last year. "On the other hand, even if there's no roll down the credit curve, the CPDO doesn't break; it just takes longer to cash in."

What I didn't stop to wonder, however, was whether the dynamics could get much worse than no roll at all. Because that's what happened: when the CPDOs rolled in September, the new index was actually tighter than the old index by as much as 15bp. That negative roll exacerbated the damage done to CPDOs which had already suffered large capital losses due to spread widening.

How can credit protection for 60 months cost less than credit protection for 54 months? It's all to do with index composition. The old index included companies which used to be investment-grade but which went to junk after being levered up in private-equity takeovers, like Alliance Boots, Alltel, Boston Scientific and Expedia.

It's an investment-grade index, so

these got kicked out and replaced by companies with much better ratings. As a result, the new index is less risky and has less carry than the old index.

Even this was foreseen when the CPDOs were issued. Citigroup modeled it, concluding that the loss of carry had "a relatively weak influence on CPDO final value unless happening under extreme conditions."

Devastating triple whammy

The real problem, then, seems to be that the people selling and buying the CPDOs knew the risk of sudden spread widening, and knew the risk of index-roll problems, especially early on in the life of the CPDO. What they didn't stop to wonder was the magnitude of the risk that spreads would widen and that the indices would get reconstituted at the same time — and do so early in the CPDO's life, when it was very highly leveraged.

That's what happened: a triple whammy that devastated CPDOs' net asset values. Most of the structures, it should be emphasized, haven't defaulted yet: they still have a lot of time to make up their early losses over the next nine or 10 years. Indeed, that's an integral part of the CPDO structure, and something which helped it get a triple-A rating.

I made that point a year ago: a CPDO has a lot more mark-to-market volatility than most triple-A-rated paper, and investors in CPDOs need stronger stomachs than most triple-A investors.

But in reality the people who did the best from the unwound UBS CPDO were those who sold back their paper at a loss, not those who held on to the bitter end. That puts the holders of other CPDOs in a very difficult position. Do they trust a discredited structure to make up its early losses? Or do they sell out now, at a large discount, in an attempt to avoid losing almost everything?

It's a hard choice to make, and not one the structurers of CPDOs ever wanted their investors to be faced with. ▼

Felix Salmon writes the Market Movers blog for Portfolio Magazine's website. He previously worked as a journalist for Bridge News, I.D.E.A. and Euromoney.