



Epsilon Theory

In the Flow – Chef's Knives

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Two weeks ago, in both the weekly ET Professional email and the ET Live! webcast, I mentioned European Senior Financial Index Credit Default Swaps (CDS) as my favorite way to set up a trade against what we see as a very complacent market narrative regarding US-China trade conflict. In this email I want to dig into that trade a little deeper.

Credit default swaps are like chef knives. They are precision instruments and a necessary tool for so many tasks in the professional kitchen. Sure, they are also sharp as hell and will give you a nasty cut if you don't know what you're doing, but the truth in the kitchen and the market is that a sharp knife is actually safer than a dull knife. Even if you don't cook or trade a portfolio professionally, you'll want to own a good knife and you'll want to know the mechanics and the rationale of a CDS trade.

What we're talking about today is buying protection through CDS. To use the insurance analogy that is typically used in explaining how CDS works, we are buying a "policy" that pays off in full if the referent credit issuance defaults over the term of the swap, typically 5 years.

But hold on, you say. I thought this was a Senior Financial *Index* CDS. How can an entire index default? Answer: it can't. This index is composed of 25 individual financial issuers, and if all of them default, then the world has ended and you should be worried about stockpiling ammo and seeds, not managing an investment portfolio. Even if one or two of these individual issuers default, they will be replaced by other issuers and you will never get a full default pay-out. Index CDS is a *very* different animal than single-name CDS ... it's a synthetic creature with no direct "insurance policy" usefulness.

You are not buying index CDS protection as an actual insurance policy against an actual default. You are buying index CDS protection for the change in *value* of that aggregated insurance policy as the component values of the component insurance policies change over time. As such, index CDS protection is a trading instrument, pure and simple. It is NOT a buy-and-hold investment or insurance policy or anything of the sort. In fact, the worst thing you can do with an index CDS is buy it, stick it in a drawer somewhere and forget about it, as you might do with an insurance policy.

But if you have an edge on the timing of an event that you believe is systemic ... ie, an event that will impact the entire financial system rather than just an idiosyncratic company or sector ... then there is no more powerful or asymmetric trade you can put on than with index credit default swaps, precisely because it *ONLY* reacts to systemic stress. Your counterparties selling you the swap don't have to worry much about idiosyncratic corporate credit risk, and so the price of the derivative security is typically very cheap, particularly on investment grade or senior debt insurance policies. And because it's going to be a 5-year contract, there's a tremendous amount of leverage embedded within the term structure itself ... again, if you have an edge on the timing here.

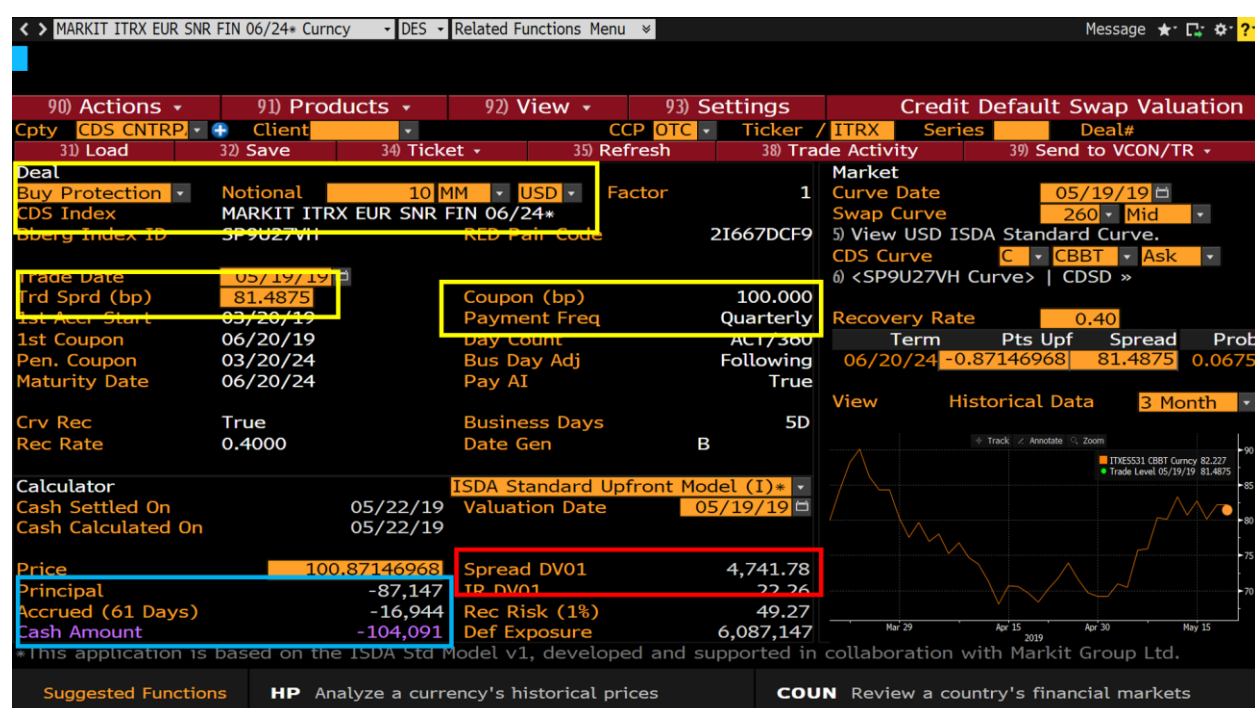
Back in the day, CDS trades were the Wild West. There was no standardization on these contracts, and certainly nothing traded on an exchange. Everything was bespoke, and counterparty risk was a very real worry. Maybe my greatest moment as a PM was novating my CDS away from Lehman, eliminating

rehypothecation in the portfolio, and switching my prime brokerage away from Bear Stearns in late 2007 and early 2008. Three big bullets dodged!

Today the CDS world is a lot safer. Starting in 2011, ISDA standardized all CDS trades on two common templates (one for Investment Grade pricing and one for High Yield pricing) and set up a clearinghouse to backstop all member banks' trades and reduce counterparty risk. Once the clearinghouse was established, it was just a matter of time before the more liquid trades could be moved over to an exchange and eliminate the need for ISDAs altogether, and that's exactly what happened with the major credit indices. If you can buy and sell commodity contracts on ICE, you can buy and sell index CDS.

Anyone can own a chef's knife today.

Here's the core Bloomberg screen (CDSW) for any standardized CDS contract today, with the major pricing elements marked by the yellow boxes, cash settlement marked by the blue box, and P&L marked by the red box:



The top yellow box is what you're buying – in this case 5 years of protection against default in \$10 million worth of the Itraxx European Senior Financial Index. The left-hand yellow box just below is the market price (the "spread") to take on this contract – in this case 81.5 basis points on the \$10 million notional exposure, or \$81,500. That right-hand yellow box is the obligation you are agreeing to in this contract – in this case paying 100 basis points per year on a quarterly schedule, so \$25,000 to the protection seller every 3 months for the 5-year term.

With a market price of 81.5 basis points, the market is saying that an "insurance premium" of 100 basis points per year is too expensive. In other words, if this contract were not standardized, the market clearing premium would be 81.5 basis points per year. So when this contract is settled, your counterparty pays YOU that difference in premium (18.5 bps) over the course of the remainin term of the contract (4.8 years or thereabouts), plus the accrued premium so far in this quarter. So what you see

in the blue box is that you are *receiving* \$104,000 today for the obligation to pay the seller \$25,000 at the end of this quarter and every other quarter for which you hold the contract.

Finally, the red box shows you the change in value for this contract for every single basis point that the market price (the spread) moves up or down. So if tomorrow the spread widens from 81.5 bps to 82.5 bps, the value of the contract would increase by \$4,742 in your favor. Vice versa if the spread narrows by a basis point.

Since I took this snapshot last week, the spread has widened 8 basis points ... call it \$38,000 in value ... to a market priced spread of 89.5 bps. If I wanted to sell this contract and realize my gains, then, I would pay the new owner of protection \$49,000 in principal (10.5 bps x 4.7 yrs) plus \$18,500 in accrued premium (the \$16,900 accrued when I bought the contract plus \$1,600 for the week I've held the contract), for a total of \$67,500. Since I received \$104,000 from the seller I bought the contract from, that's \$36,500 remaining for me.

It's a weird instrument, right? You have to post some margin to cover your potential P&L losses, but it's a very small margin requirement if you're buying protection (significantly more if you're selling protection) because the asymmetry of how much the spread can narrow versus how much it can widen is so pronounced. I mean, at one point you could buy protection from GS with a 2% margin on notional, so potentially a 50x leverage on a cash account. That would be nuts, of course, but it's indicative of how easy it is to buy a lot more insurance than you have assets to "insure".

Here's the price history of the spread since these contracts were standardized in 2011. I've circled in red the last two times we had a sharply strengthening dollar and a sharply weakening yuan, because that's what I think is highly likely here ... not a blowing out of spreads to 300 bps wide like in the full-blown Euro crisis of 2001 and 2012, but a spiking of spreads to 120 – 140 bps wide as systemic concerns of a yuan devaluation and/or a credit freeze around trade finance take hold.



Here's the first of those red circle periods (Q1 2016), showing how the blue yuan spikes (weakens) before the yellow iTraxx Senior Fin'l CDS spikes.



And here's the second of those red circle periods (Q4 2018), showing the same thing ... and how the yuan has spiked (weakened) again here in May. I think the SnrFin CDS will follow suit. Again.



As always, happy to discuss this instrument and this trade in more detail if you like. I realize this discussion is old hat for some and way in the weeds for others, but I hope you found this primer useful!

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