

Credit

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High Grade Strategy Notes

Corporates as Collateral

- Estimates are that as much as \$2 trillion of collateral will ultimately need to be sourced as a result of derivatives moving to central clearing. But by many accounts, the market is already undergoing a collateral crunch.
- Relative to the pre-Lehman era, collateral chains are still shorter, fewer government bonds meet the eligibility requirements, and margins/haircuts remain elevated. The only plausible way to alleviate the crunch requires increasing the supply of unencumbered collateral.
- As of mid-March, the CME has begun to accept higher rated investment grade bonds as collateral for interest rate swaps, options, futures, and select forwards. Moreover, as reported by Bloomberg, LCH Clearnet may follow suit.
- The list of acceptable CME collateral includes any USD corporate bond rated single-A or higher by at least one rating agency. However, the majority of the financial sector is excluded (i.e. no banks or REITs).
- The implications of allowing investment grade bonds as collateral to derivative trades is unclear, at best. We suspect opening the doors to wider use of corporates as collateral will create a positive technical given the current collateral shortage. But since corporates are unlikely to ever be the first choice for investor collateral needs, the technical might prove temporary should conditions change. In addition, clearing houses will now bear the considerable deleveraging-deflation risk embedded in illiquid securities rather than banks.

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Corporates as Collateral

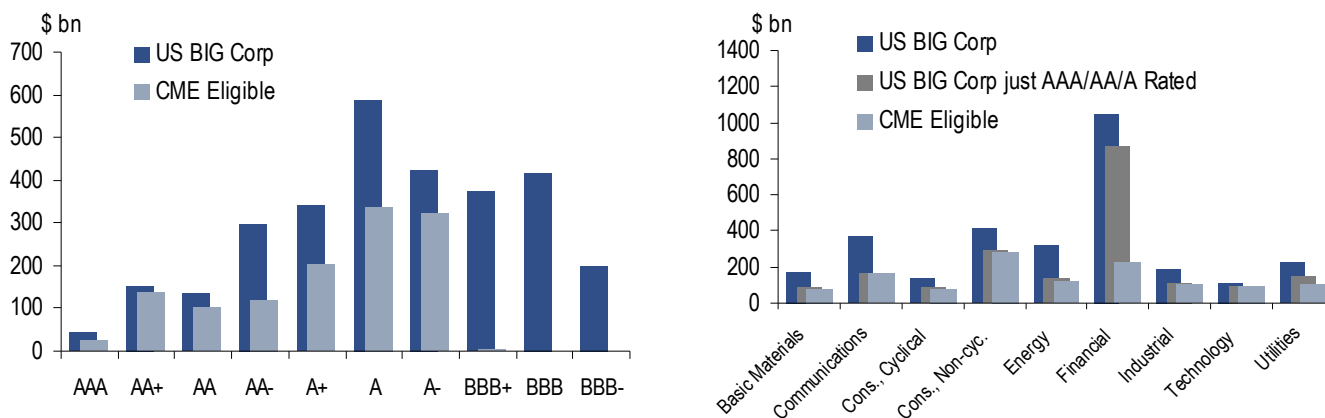
By many accounts, the market is undergoing a collateral crunch that is unlikely to be alleviated by conventional measures any time soon. Hence, there has been an emphasis on widening the pool of what is deemed acceptable collateral. Investors have been able to repo high grade corporate bonds with banks for ages. But it now seems as if the clearing house industry is likely to follow suit. As the need to source new collateral is considerable in a post Dodd-Frank world, in this short note we explore what implications the clearing houses' moves could have for corporate bonds. We suspect opening the doors to wider use of corporates as collateral will create a positive technical given the current collateral shortage. But since corporates are unlikely to ever be the first choice for investor collateral needs, the technical might prove temporary should conditions change.

CME opens Pandora's box?

As the IMF notes¹, a key part of the response to the credit crisis by the UK and the US was the swapping of "government debt for a variety of less liquid collateral including mortgage backed securities." But it's clear to us that more needs to be done. Relative to the pre-Lehman era, collateral chains are still shorter (i.e. the number of times collateral is re-pledged), fewer government assets meet the eligibility requirements (Greek bonds for instance), and margins/hairecuts remain elevated. To our minds, the risk is that a collateral shortage exacerbates interbank stress and worsens financial conditions more broadly. The only way to alleviate the crunch requires increasing the supply of unencumbered collateral.

It turns out that for some time now the clearing houses have been debating accepting corporate bonds as collateral, which relative to other less risky asset classes are much less encumbered. But until CME began accepting corporate bonds for margin purposes on futures, options, interest rate swaps, and select forwards on March 12, we – and we suspect others – were somewhat unaware of the changes being considered. Perhaps we should have been more vigilant. After all, late last year, it was reported by Bloomberg that LCH Clearnet was considering adding corporates as acceptable collateral², and the OCC already accepts some corporate bonds, although under rather restrictive criteria³.

Figure 1. CME Eligible IG Corp. Bond Collateral vs. Citi's US Broad IG Corp. Index by ratings (left) and sectors (right)



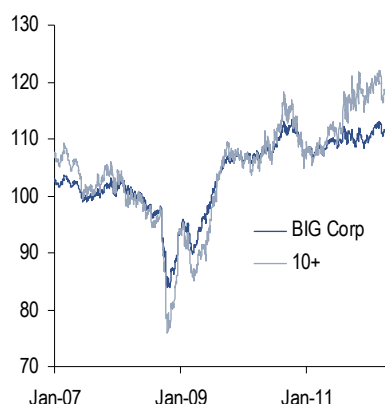
Source: CME, Yieldbook, Citi Investment Research and Analysis

¹ Manmohan Singh and Peter Stella, 2012, "Money and Collateral", IMF Working Paper 12/95.

² <http://www.bloomberg.com/news/2011-10-14/lch-clearnet-weighs-corporate-bonds-as-collateral-to-back-swaps.html>

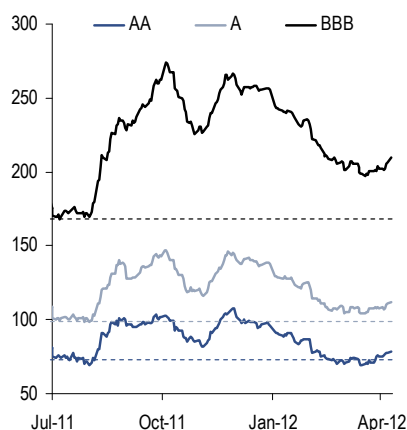
³ Specifically those traded on national exchanges that are rated in one of the four highest categories

Figure 2. Price performance of US BIG Corp.



Source: Yieldbook, CIRA

Figure 3. Non-fin US BIG Corp., OAS (bp)



Source: Yieldbook, CIRA

In any case, the list of acceptable CME collateral includes any USD bond rated single-A or higher by at least one rating agency, but excludes the majority of the financial sector, likely because of the correlation between financials and the health of clearing houses⁴. CME margin haircuts on corporate collateral have been set at 20%, which is more punitive than Treasuries (the haircuts of which vary between 3% to 6% depending on maturity), but arguably still attractive considering the credit risk.

A recipe for a 2008 repeat, or another positive technical?

Frankly, the implications of allowing investment grade bonds as collateral to derivative trades is unclear, at best. From the perspective of financial transparency, it's likely a good thing that there will be fewer collateral transformation trades intermediated by banks. The business may be profitable, but off balance sheet repo was certainly a contributor to the credit crunch. Nonetheless, the inherent risk in pledging less liquid collateral to finance derivative positions doesn't go away just because the banks aren't the ones facilitating the process.

By removing the middleman, the clearing houses now bear the considerable deleveraging-deflation risk embedded in illiquid securities. For during a crisis it is likely that the market value of corporate bonds would decline (in contrast to Treasuries) and clearing houses might be tempted to raise haircuts on riskier collateral. As such, investors could be forced to exit derivative positions and sell corporate bonds to raise cash (i.e. transform their corporate bond collateral into more liquid government collateral with lower haircuts). But responding in such a fashion can easily exacerbate a selloff, as was evident during the credit crunch.

In that respect, a 20% haircut, at least on the face of it, seems like it might offer enough insulation to the clearing houses. But then again, immediately after Lehman's bankruptcy the investment grade corporate bond index dropped by about 14 points while longer dated bonds dropped by more than 20 points. So it may not be inconceivable to contemplate post-facto raising of haircuts by the clearing houses.

Moreover, collateral calls are daily occurrences where clearing houses collect variation margin to take into account changes in the market value of the collateral as well as the derivative position being collateralized (this is in addition to the 20% initial margin). So in a repeat of 2008, an investor using corporate bonds would have to raise additional collateral anyway even if the clearing house refrained from changing their margin rules. To our minds, that creates a potentially dangerous technical. Yes, clearing houses are protected through the use of margin, but that "protection" will come at the expense of higher volatility during periods of crisis.

For the time being though, the widening of eligible collateral to high quality corporate bonds should create a positive technical. And in fact, that's what we see as the spreads of AAA, AA, and A rated US non-financial corporate bonds are back to their early August levels, while BBB rated non-financial bonds are still well wide. That's notable because while US corporate bonds have been exhibiting a fair amount of yield sensitivity (for a number of reasons), it seems the lowest yielding bonds are the least yield sensitive and the highest yielding bonds are the most. A "collateral bid" for higher rated bonds would partly explain the mystery.

⁴ No banks or REITS, although some insurance, consumer finance, and diversified financial issuers are allowed.

Of course the outperformance of AA and A-rated US corporate debt could be attributable to other factors as well. To be sure, we believe higher rated corporates owe most of their performance to a substitution trade of sorts. More and more often, traditional holders of large government security portfolios (US and otherwise) are seeking to diversify into asset classes with less sovereign risk and positive real yields – either of their own volition or because there simply are not enough safe government assets to go around. And from that perspective, higher rated investment grade corporates fit the bill.

Separating the substitution trade from the collateral trade is tricky business because the two are interconnected. But while we tend to place more emphasis on the substitution trade as the driver of high quality corporate outperformance, we've seen estimates suggesting anywhere from \$500 billion up to \$2 trillion of collateral will ultimately need to be sourced as a result of derivatives moving to central clearing⁵. If those higher estimates prove correct and a fraction of that collateral ends up being corporate bonds, then the added demand could be meaningful. After all, the A-rated and higher portion of the investment grade universe is roughly \$2 trillion itself.

Whether this “collateral bid” is already represented in current corporate bond prices is up for debate, in our opinion, and the answer could be particularly important should the collateral squeeze reverse. For instance, the removal of QE would likely entail the Fed selling down its portfolio of US government securities at some point and these securities are likely to displace corporate bonds as collateral since margins are far less onerous – and the government collateral is counter-cyclical (Treasury prices tend to rise when the market undergoes stress). As such, if any of the technical support for high rated corporate bonds is attributable to its collateral eligibility, it could then vanish and result in underperformance versus lower rated debt at some point in the future.

⁵ Manmohan Singh and James Aitken, 2009, “Counterparty Risk, Impact on Collateral Flows, and Role for Central Counterparties”, IMF Working Paper 09/173.
Segoviano, Miquel and Manmohan Singh, 2008, “Counterparty Risk in the Over-The-Counter Derivatives Market”, IMF Working Paper 08/258.

Appendix A-1

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