



# Understanding extension risk in hybrid debt

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## Non-financial corporate hybrids – An approach to extension risk

For investors in non-financial corporate hybrid debt, understanding extension risk is the key to spot opportunities, says Robin Usson, senior credit analyst, Federated Hermes.

### Key Points:

- For non-financial corporate hybrids, fundamentals still matter
- The main driver of sub-senior spread is extension risk, as coupon deferral risk is structurally low and early call risk is often manageable
- Yet extension risk is often mispriced during market sell-off, creating structural alpha
- We are buyer of extension risk premium when it exceeds >10% of fair value for lower-beta hybrid and 20% for higher-beta hybrid

The non-financial corporate hybrid sub-asset class has matured since the emergence of standardized structures in 2012/2013. Over the past decade, it has built a track record of investor-friendliness, and we believe the Covid-19 pandemic may have propelled the sub-asset class into a new paradigm thanks to limited extensions and coupon deferrals over the period.

Against this backdrop, hybrid debt instruments are essentially higher beta debt instruments, offering high yield returns with investment grade credit risk obtained by moving down the capital structure and being long subordinated risk.

### What is subordinated risk (and why are we generally comfortable with it)?

Non-financial corporate hybrids have a similar risk profile to high quality high yield credits, yet a different risk composition. Buying a corporate hybrid over a high yield bond is equivalent to buying subordinated risk over additional credit risk or, said differently, is akin to trading a 'higher default probability' (by going down the ratings spectrum) for a 'higher loss given default' (by going down the capital structure).

We can decompose a corporate hybrid's credit spread into five elements:

- 1) Credit risk, as measured by the senior spread
- 2) Structure/Subordinated risk, as measured by the four variables below
  - a. Subordination risk
  - b. Coupon deferral risk
  - c. Covenant / Early Call / Special Event Call risk
  - d. Extension risk

What we call the 'structure risk', or 'subordinated risk' is the spread hybrid investors receive for (i) obtaining low to no recovery in a restructuring scenario (the hybrid instrument is deeply subordinated and has no voting power in a restructuring proposal), (ii) selling several potential coupon deferrals, (iii) selling early call options to the issuer and (iv) locking capital in for long period of time if not called.

The subordination risk is the additional default risk associated with the subordination of the instrument. It is based on its relative loss rate vs. its senior bonds. It requires an assumption on senior bond recoveries. Our theoretical multiple is 1.67x stemming from a 40% recovery rate for seniors.

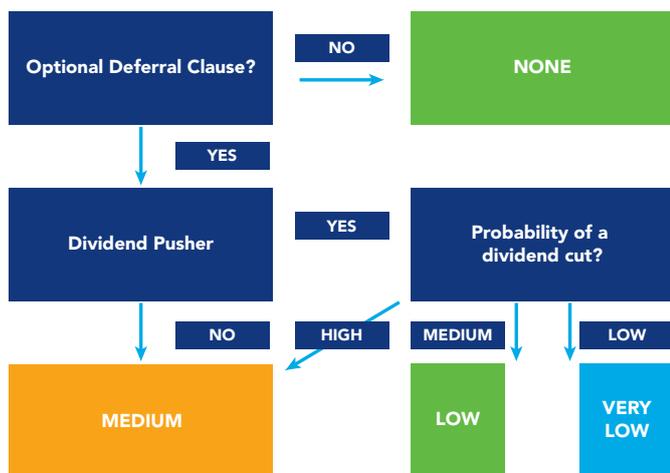
$$\frac{(1-\text{Hybrid Recovery of } 0\%)}{(1-\text{Senior Recovery of } 40\%)} = 1.67x \text{ multiple}$$

The lower the senior recovery is, the lower the subordination risk is relative to senior. This makes sense as in such cases hybrid investors would lose less relative to senior in a restructuring scenario by moving from senior to sub. This should however be offset in absolute spread terms as in such an instance, the senior instrument's credit spreads should also be wider to reflect lower recoveries.

Under the 'standard' hybrid structure, coupon deferral risk is low (albeit admittedly higher for unrated hybrids and preferred shares). All European corporate hybrids contain cumulative deferral language in the event of optional deferral, so although skipping coupons would be taken negatively by the market, it is unlikely to result in significant losses. The fact that deferred coupons would be cumulative reduces the incentive for issuers to skip coupons as it would have no impact on credit metrics. Overall, coupon deferral risk is unlikely to materialise unless the company is in real distress. This means that for stable IG-rated hybrid issuers, the required premium for coupon deferral risk should be minimal as suspending hybrid coupons only makes sense in the event of a weak and deteriorating liquidity position.



**Chart 1: Coupon Deferral Risk, structurally a low risk**



Source: Federated Hermes Ltd Credit Research

In practice, deferral risk has remained low through the Covid-19 crisis, with no coupon payment suspension with the exception of German-based carrier Lufthansa. Lufthansa was in fact an isolated case in that it had to defer coupon payments because of revised EU State Aid Rules (May 2020)<sup>1</sup>.

Most event call options to date have been substantial repurchased events/clean-up calls after liability management exercises brought the amount outstanding above thresholds to trigger a call. Other covenant risks include CoC call options, rating event call options, accounting event call options, tax and withholding tax event call options. Early call options are a tail risk for hybrids trading significantly above par – but are often manageable for the averted eyes.

At constant creditworthiness (as defined by a stable rating), we generally feel comfortable with structure risks. However, structure risks start to materialize when the issuer moves to sub-investment-grade and credit deterioration accelerates. In more stressed scenarios, the downside to bond pricing can be rapid in the extreme as hybrid bondholders have no negotiation power in restructuring. Hence having comfort in the rating trajectory of a hybrid issuer is of paramount importance. In other words, in the hybrids space, fundamentals matter.

### S&P Global Ratings, the main line of defence against extension risk

When it comes to structure risks, we believe coupon deferral risks are structurally low, subordination risk is constant (assuming through-the-cycle senior recovery rates of 40%), and early call risks are manageable. The main driver of sub-senior spreads (SSS)<sup>2</sup> therefore stems from extension risk.

To assess extension risk, we must first understand how ratings agencies treat hybrid instruments. Ratings agencies differ in how to treat hybrids, particularly when it comes to the granting/removal of the Equity Credit/Content (EC) component of a hybrid bond.

Unlike Fitch and Moody's, S&P generally removes the EC component if a hybrid issuer does not call at first call date thanks to the way 'standard' hybrids are structured. Effectively, this makes S&P the standard-setting ratings agency and the main line of defence against extension risk. This EC removal of the non-called hybrid structurally lowers extension risk as, without the 50% EC, the hybrid loses its effectiveness from the issuer's perspective and becomes expensive senior debt. The prevailing level of market interest rates makes no difference in this relative cost assessment between senior versus subordinate spreads because the hybrid coupon reset includes an addition of the prevailing swap rate. Hence the decision is all about the relative credit spread, and, on that basis, choosing to hold onto hybrids that are effectively senior debt would be costly indeed.

#### S&P

- Cancels the EC component of bonds 20 years before effective maturity for investment-grade-rated instruments, 15 years for instruments rated BB and 10 years for instruments rated single B.
- The issuer will lose the EC component if it chooses not to refinance the hybrid when the issuer is not under financial stress (the issuer wouldn't lose the EC component if the hybrid layer was absorbing losses in times of stress, for example).
- If the issuer gets a rating upgrade, the issuer can choose not to replace existing hybrids with new ones without losing the EC component of its hybrid layer.

#### Moody's

- Removes the EC component of the bond 10 years before maturity for dated hybrids, but not for perpetual hybrids
- The issuer does not lose the EC component if it chooses not to refinance.
- However, the issuer loses the EC component when Moody's downgrade the issuer's Corporate Family Ratings to High Yield

#### Fitch

- Removes the EC component five years before effective maturity.
- The issuer does not lose EC component if it chooses not to refinance.

<sup>1</sup> Article 77 of the revised rules states that 'As long as the Covid-19 recapitalisation measures have not been fully redeemed, beneficiaries cannot make dividend payments, nor non-mandatory coupon payments, nor buy back shares, other than in relation to the State'. TF\_consolidated\_version\_as\_amended\_3\_April\_and\_8\_May\_2020\_en.pdf (europa.eu)

<sup>2</sup> SSS: Short for 'sub-senior spread'. The sub-senior spread measures the additional spread a subordinated instrument yields above a duration-match senior bond of the same issuer. This is the additional spread associated with structure risks we discussed earlier in this note.

**A framework to assess extension risk**

The rationale for a rated non-financial corporate issuer to issue a loss-of-equity-credit structured hybrid instrument (standardized European-style) is ratings-led. This contrasts with financials (regulated-led), unrated hybrid issuers and high-step up structures (accounting-led) for which assessing extension risk is purely an economic assessment.

Yet, although for rated non-financial corporate hybrid issuers, assessing extension risk is first and foremost a rating assessment, we must also consider:

(a) A fundamental assessment (when the issuer receives the EC component by S&P)

Or:

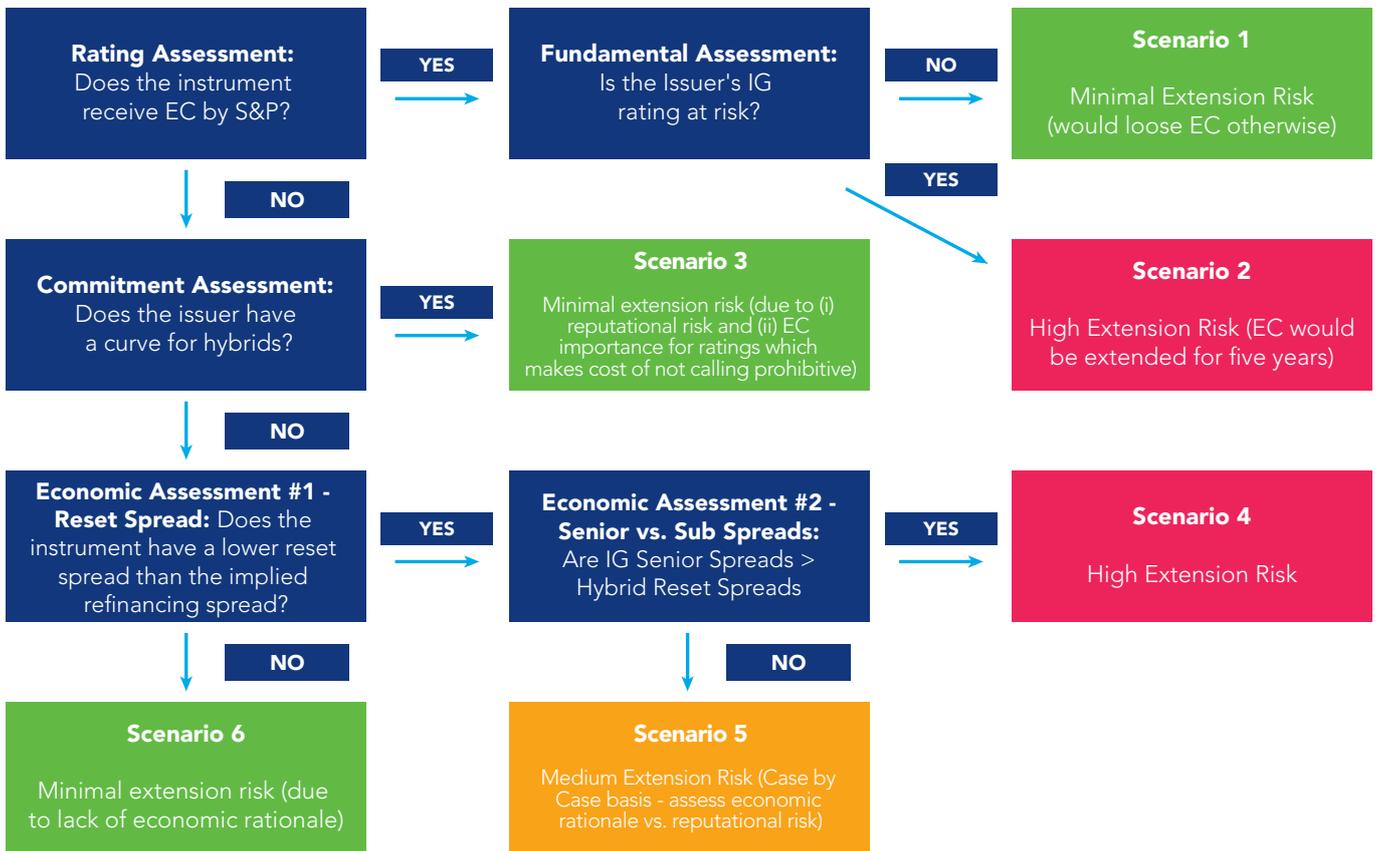
(b) A commitment assessment otherwise.

When both conditions from these assessments are met, extension risk is minimal as the implied long-term cost of extending hybrids would be very high. If the conditions are not met, then we would conduct an economic assessment.

Under the S&P methodology, hybrid instruments are structured to lose the EC component at their first call date. When a hybrid issuer displays similar creditworthiness from issuance to first call date (defined as a stable rating), extension risk becomes limited. This is because not calling the instrument would remove the main balance sheet benefit while increasing the weighted average cost of capital.

To illustrate how we assess extension risk, we developed a decision tree (see Chart 2) which reflects our team’s top-down approach to determining which non-financial corporate hybrids are subject to extension risk:

**Chart 2.** How to identify extension risk for European-style, loss-of-Equity-Content (LoEC) structured hybrid instruments through our decision tree approach



Source: Federated Hermes Ltd Credit Research





Out of the six potential outcomes listed in Chart 2, we see three scenarios for which pricing extension risk is justified:

- Scenario 2: When hybrids receive the EC by S&P and for which the issuer's IG rating is at risk. Under such a scenario, the EC would be extended for a minimum of five years (depending on the ratings). Extension risk under Scenario 2, when the issuer's IG rating is at risk therefore becomes high (although this can somehow be mitigated by a flexible second step-up date mechanism)
- Scenarios 4 & 5: When hybrids are not rated by S&P as EC would not drop at first call date by the other agencies. In this scenario, we would conduct two economic assessments: (1) on reset spreads which, if not met, would then be further assessed on a case-by-case basis and would generally imply medium extension risk, and (2) on senior vs. hybrid spread, which if not met, would lead us to assess a high extension risk

Otherwise, we view the extension risk of such instruments as being structurally minimal.

### We would expect the long-term economic hit of not calling at first call date would exceed the short-term economic gain of not calling.

One may argue that the reality is slightly more nuanced. In its General Criteria: Hybrid Capital: Methodology and Assumptions white paper, S&P has given itself the flexibility to incorporate 'benefits of the hybrid in other aspects' even if it 'no longer qualifies as having intermediate equity content because its effective maturity date is less than 20 years away'. What this means is that, in theory, a corporate hybrid issuer could not call its hybrid at first call date for economic reasons. It would therefore be foolish to completely rule out a 'Santander AT1 moment' in the non-financial corporate hybrid market, but overall, we view such risks as structurally low for a variety of reasons:

- (1) Sub-senior spreads are now structurally lower: The sub-asset class has matured, and sub-senior spreads (SSS) are now structurally lower than in the past, reducing the risk of prolonged periods of high sub-senior spreads.
- (2) Reputational Risk: In 2018, S&P's revised hybrid methodology offered more flexibility to manage ones' hybrid call dates. An issuer can now conduct liability management exercises to pre-emptively tackle its upcoming hybrid call dates. Being unable to find an attractive window to refinance through liability management would send a negative signal on the credit friendliness of management.

- (3) Long-term Weighted Average Cost of Capital (WACC) implications: Since non-financial corporates issue hybrid instruments by choice rather than being forced to do so by regulators, we believe challenging the market's expectations regarding non-financial corporates calling these securities will affect how they are priced in future, and the primary market is likely to demand, like-for-like, higher coupons on new issuance.

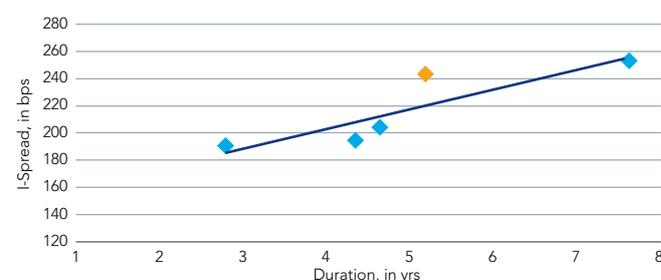
This is especially the case given that the rationale behind such issuance is either (1) ratings protection when hybrids are substituted for debt via the 50% EC structure (which reduces the leverage ratio) or (2) WACC reduction when swapping a portion of equity for hybrids (as cost of hybrid is generally about 25% the cost of equity).

In other words, we would expect the long-term economic hit of not calling at first call date would exceed the short-term economic gain of not calling. We believe this would be more expensive for hybrid issuers in the long term and we expect a sustained adverse bondholder reaction to a non-call that would effectively remove management's ability to approach future call dates of hybrids with the same flexibility. Ultimately, this could cause even more strain on the credit ratings of such issuer in the medium-term if it becomes unable to refinance any of its hybrid at first call date, and thus lose its equity content at S&P.

### Extension risk: How to spot a free lunch; low-to-high reset spread arbitrage

When spreads move materially wider, investors start paying closer attention to reset spreads, which often creates dislocations within a hybrid issuer's curve (ie low-reset spread hybrids trade wide; high-reset spread hybrids trade tight). This is due to investors' over-emphasis on the economic rationale in their assessment of extension risk. But pricing a different probability of extension risk at the instrument level for a non-financial corporate hybrid issuer when this issuer receives Equity Credits by S&P and for which the S&P's IG rating is not at risk highlights short-term behaviour and leads to a mispricing of extension risk. **This creates structural alpha – and an opportunity to take advantage of such pricing fluctuation of extension risk.**

Chart 3: Example of a European utility: Low-reset spread during a market sell-off: how to generate structural alpha



Source: Bloomberg, Federated Hermes Ltd Credit Research; Trading data from 11 February 2022; Yellow = low-reset spread hybrid.

To provide an illustration of such free lunch, we can look at one of the largest non-financial corporate hybrid issuers. The choppy market conditions seen in February 2022 presented a window to generate such structural alpha by switching from this hybrid issuer’s high-reset spread hybrids into its lowest-reset spread hybrid instrument, which traded ~25bps outside its implied FV based on an interpolation of its hybrid’s curve. In April 2020, the lowest-reset spread hybrid of the same issuer traded ~80bp wide to its theoretical price, equivalent to ~30% more in spread terms... talk about a free lunch!

The moral of the story is that in broader market sell-offs, investors start pricing extension risk based on economics only. This is a short-sighted view in our opinion and is often unjustified, opening avenues for alpha generation at the security level. Being long intra-curve extension risk also generally equates being long convexity, when other high-reset spread hybrids have similar maturities.

**We considered three different sell-off periods: (1) H2 2018 / H1 2019 (the 2018 ‘taper tantrum’ sell-off) (2) 2020 (or the Covid-19 sell-off) and (3) 2022 (or the ‘2022 ECB accelerated taper fear’).**

**Timing the market for low to high reset spread arbitrage**

As a market sell-off can last for a prolonged period, we looked for historical signals to better time our low-to-high reset spread arbitrage. To do so, we first computed a theoretical price for each low-reset spread hybrid, simply defined as a linear interpolation between the two higher-reset spread hybrids closest in duration. We then computed an ‘extension risk premium’, calculated as the difference between the lowest-reset spread hybrid and its interpolated theoretical price. To adjust for differing absolute spread terms, we then computed that extension risk premium as a percentage of the theoretical price to look for evidence and signals of when to switch from high-reset spread hybrids into low-reset spread hybrid and better time the market.

We considered three different sell-off periods: (1) H2 2018 / H1 2019 (the 2018 ‘taper tantrum’ sell-off) (2) 2020 (or the Covid-19 sell-off) and (3) 2022 (or the ‘2022 ECB accelerated taper fear’).

Here we found that the sweet spot to go long extension risk of lower beta hybrids is when the extension risk premium exceeds 10% of its theoretical price; and for higher beta hybrids when it exceeds 20%. We usually define lower beta hybrids as hybrids rated at investment grade, although we have also extended that definition to hybrids from utilities companies rated as high yield. In the same manner, we define higher beta hybrids as being generally rated high yield but have extended the definition to hybrids from Cyclical rated at investment grade, as well as higher beta idiosyncratic stories.

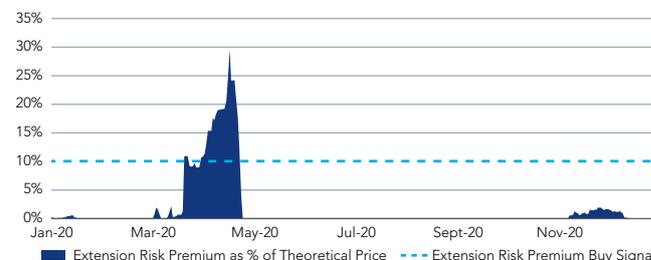
Note that sustainable hybrid bonds (green, social, sustainable) may distort some of these findings as such labelled instruments tend to show lower volatility during sell-offs. We have however observed the same extension risk premium phenomenon in a hybrid’s curve of solely green instruments.

**Chart 4: Examples of lower beta hybrids extension risk premium during periods of volatility**

Extension risk premium (as a percentage of the theoretical price) of the low-reset spread hybrid of a European utilities company during the 2018 taper tantrum induced-sell off (~4yrs to first call date)



Extension risk Premium (as a percentage of the theoretical price) of the low-reset spread hybrid of a European telecommunications company during the Covid-19 induced sell-off (~9yrs to first call date)



Source: Bloomberg, Federated Hermes Ltd Credit Research; Historical Trading data as of 21 April 2022

**Chart 5: Examples of Higher beta hybrids extension risk premium during periods of volatility**

Extension risk Premium (as a percentage of the theoretical price) of the low-reset spread hybrid of a European utilities company during the Covid-19 induced sell-off (~3.5yrs to first call date)



Extension risk premium (as a percentage of the theoretical price) of the low-reset spread hybrid of a European REIT repeatedly above 20% (~3yrs to first call date)



Source: Bloomberg, Federated Hermes Ltd Credit Research; Historical Trading data as of 21 April 2022

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