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## Spotting Hidden Extension Risk in Corporate Hybrids

Corporate hybrid instruments have distinctive features, most notably the issuer's ability to choose not to call the bond at its first call date and to defer coupon payments without triggering a default. In return for these features, investors are rewarded with wider spreads than they would get from the same issuer's senior bonds.

In general, the way hybrids are structured, the economic incentives and the issuer's potential reputational damage have made extensions beyond the first call date very rare, especially among investment grade issuers. As such, most investors assess the risks to be low as long as senior spreads remain narrower than a hybrid's reset level, and as long as the issuer remains strategically committed to maintaining hybrids in its capital structure and secure in its investment grade rating through the cycle.

In most cases, when combined with deep fundamental credit analysis, we agree this is enough. But exceptions do exist, and they can be negative for investors. In this paper, we outline a framework that we believe can help investors avoid this tail risk, by revealing telltale signs of hidden extension risk waiting to be realized when times get tough.

## Executive Summary

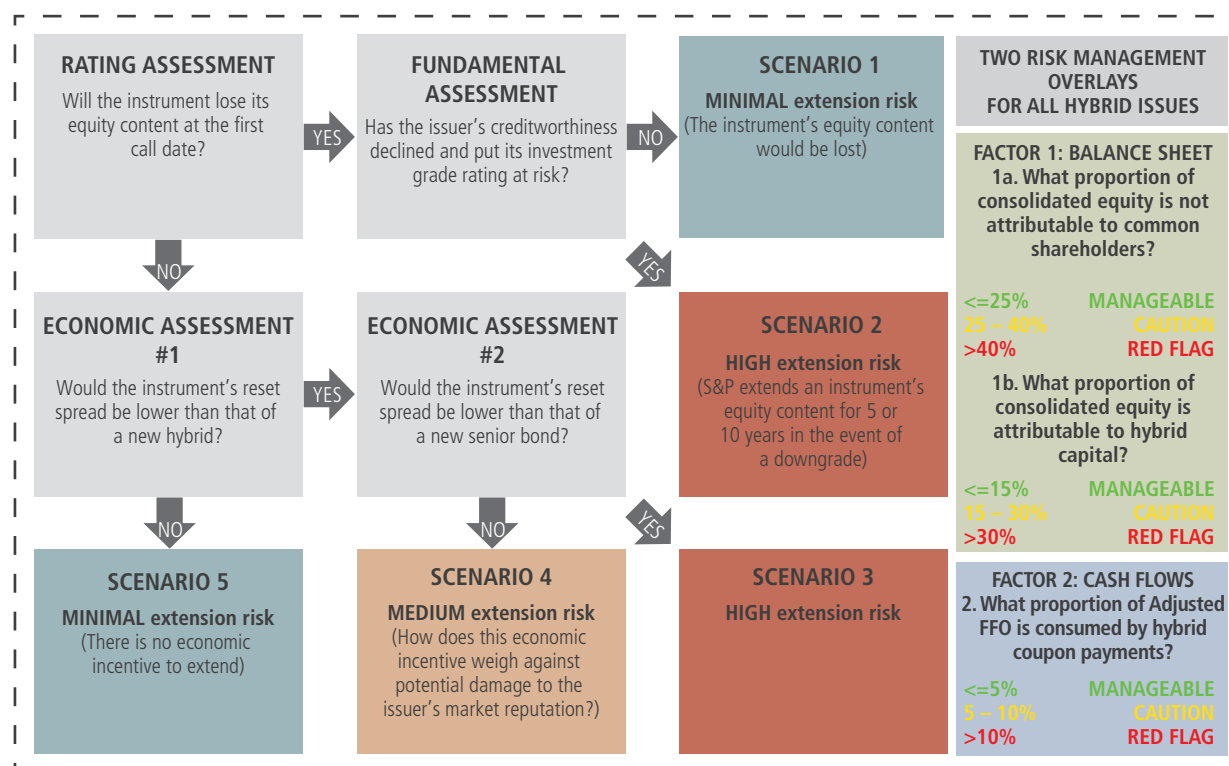
- We cannot emphasize enough how much we believe bottom-up credit research matters in corporate hybrids, given the asymmetry of downside risk and upside return potential that is associated with subordination.
- While the track record of this asset class shows that, regardless of the economics, extension risk is structurally low once a corporate hybrid instrument loses its equity content, the main driver of spreads remains fluctuations in market pricing of extension risk.
- Investors tend to assess extension risk based on how the hybrid structure interacts with rating-agency policy on equity content, issuers' economic incentives at first call date, and reputational implications for the business should they exercise the optionality embedded in the security, as outlined in our simplified decision tree below.
- For efficient tail-risk management of extension risk through the cycle, we believe prudent investors should also consider two accounting factors:
  - The “Balance Sheet Factor”—Sustainability of the equity structure: The equity structure can profoundly affect corporate strategy decisions. A weak equity structure, characterized by a disproportionate amount of equity being attributable to stakeholders other than the ultimate owners of a business, creates, in times of stress, an incentive to utilize the equity-like features embedded in the hybrid, including the ability to extend. We believe this risk is raised further when hybrid equity is a disproportionately large share of the equity layer, resulting in higher financial leverage.
  - The “Cash Flow Factor”—Proportion of cash flow consumed by hybrid coupon payments: The quality of cash flows, their sources and uses can also impact corporate decisions. We identify thresholds over which the ratio of hybrid coupon payments to “Adjusted Funds From Operations” (Adjusted FFO) becomes a cause for concern. Any deterioration in underlying credit fundamentals is amplified by the debt-like feature of hybrid coupons, which create higher operating leverage, and that could tempt the issuer to save cash by utilizing the hybrid's deferral mechanism.
- Our analysis indicates that caution is warranted whenever one or more of the following is true:
  - More than 25% of an issuer's consolidated equity is not attributable to common shareholders.
  - More than 15% of an issuer's consolidated equity is attributable to hybrid capital.
  - More than 5% of Adjusted FFO is consumed by hybrid coupon payments.
- Breaches of these thresholds have been rare among hybrid issuers, and seen only recently among certain stressed parts of the Real Estate sector, but we believe monitoring these fundamental metrics can help reveal potential “hidden” extension and coupon-deferral risks, which may materialize when unforeseen external shocks create credit deterioration.

Fixed income investing at Neuberger Berman is driven by a focus on fundamental bottom-up credit research, and our work in corporate hybrids is no exception.

Indeed, we believe credit fundamentals may be an underappreciated factor determining the risk of an issuer extending a hybrid beyond its first call date. Extensions remain rare, particularly in the European hybrids market where investor and issuer incentives are highly aligned, but we believe an investment process that fully integrates fundamental analyses of issuers' capital structures and cash flows is necessary to keep this issuer optionality deeply out of the money.

Below we outline a simplified decision tree showing what we regard as the “standard” approach to assessing hybrid extension risk, augmented by two risk management tools designed to reveal concealed vulnerabilities in the balance sheet and cash flow profile of a hybrid issuer. We believe this is particularly useful since rating agencies can lag in reflecting credit deterioration, as seen recently in the European Real Estate sector. Investors could use favorable trading periods to switch from issuers displaying yellow or red flags to those displaying green flags, thereby minimizing hidden embedded extension risk.

## A SIMPLIFIED DECISION TREE FOR ASSESSING EUROPEAN HYBRID EXTENSION RISK



This decision tree distills a decade of our experience with corporate hybrids. Over the course of this paper, we will break it down and explain why we believe each part of the process is crucial for adequately assessing risk and avoiding tail-risk exposure in the asset class.

### The Pre-eminence of Extension Risk

The corporate hybrid market has traded with an average spread of around 200 basis points over the investment grade senior bonds universe.

A corporate hybrid's spread can be decomposed into five elements:

- 1) **Credit Risk**, as measured by the senior spread
- 2) **Structure Risk**, which can in turn be decomposed into:

- a. Subordination Risk

Hybrids are deeply subordinated, confer no voting power in a restructuring and are likely to have zero recovery value in a default (or a very low recovery value relative to a senior bond). This risk can be mitigated by favoring higher-quality, investment grade hybrid issuers.

- b. Coupon Deferral Risk

While coupon payments can be deferred without triggering a default, they are cumulative and therefore cannot remain indefinitely unpaid without triggering a default. As such, deferrals would be taken negatively by the market, but are unlikely to result in significant losses. Moreover, the issuer's incentive to defer payment is weak, as deferral of payments that must eventually be honored does not affect the issuer's credit metrics. Deferrals have been associated with issuers already under considerable stress.

### c. Covenant / Early-Call / Special-Event-Call Risk

Most Event-Call options exerted to date have been Substantial Repurchase Events or “Clean-up Calls,” following liability management exercises that brought the amount of hybrid capital outstanding above a threshold to trigger the event. Other Covenant risks include Call-on-a-Call (“CoC”), Rating-Event, Accounting-Event and Tax-Event Call Options. All of these become greater risks when hybrids trade above par, but in our view, they are manageable tail risks for investors.

### d. Extension Risk

Extension risk is the risk that a corporate hybrid is not called at the first call date. Because subordination risk is constant and generally easily mitigated, coupon deferral risk is structurally low and early-call risks are manageable, we regard extension risk—while also structurally low—as the major component of a hybrid’s spread over the same issuer’s senior bonds.

How should an investor assess this risk?

## First Steps: Ratings Agency Equity Content and Economic Incentives to Extend

The first step in assessing extension risk is understanding how ratings agencies treat hybrid instruments, and particularly how they grant and remove a hybrid’s equity content.

In recognition of their equity-like features, the main ratings agencies assess hybrids as having a certain amount of equity content, which means they count less toward an issuer’s debt and leverage metrics than an ordinary bond. However, this equity content may not last forever, and different ratings agencies apply different policies for removing it. See figure 1 for the outlines of these policies at Standard & Poor’s (S&P), Moody’s and Fitch.

**FIGURE 1. HYBRID FEATURES REQUIRED BY THE MAIN RATINGS AGENCIES TO ASSIGN 50% EQUITY CONTENT**

	S&P	Moody's	Fitch
<b>Maturity</b>	>20yrs remaining to Effective Maturity <sup>(1)</sup> for BBB and higher; >15yrs for BB and >10yrs for B	>30yrs at issuance and >10yrs remaining to Maturity (≠ Eff. Mat.)	>5yrs remaining to Effective Maturity <sup>(2)</sup>
<b>Subordination</b>	Subordination typically a secondary factor compared to other beneficial aspects of equity	Subordinated	Subordinated
<b>Callability / Step-Up</b>	Step-up ≤ 25bps or Step-up ≤ 100bps with RCC	Step-up ≤ 100bps starting after year 10 (from issue date)	Step-up ≤ 100bps with replacement language or statement of intent
	Not be callable within 5yrs of the issue date		Permanence necessary for equity recognition / Intent-based replacement language usually sufficient
<b>Deferability</b>	Coupon deferrable for at least 5yrs (no equity content otherwise)	Optional deferral for a length of time sufficient (typically several years)	Coupon deferrable for at least 5yrs (no equity content otherwise)
	Cumulative allowed	Cumulative allowed	Cumulative allowed
	Divi stopper/pusher with ≤ 1yr lookback allowed	Divi pusher lookback ≤ 6mth allowed	Lookbacks allowed
<b>Notching</b>	Generally -2 notches, of which -1 for subordination and -1 for coupon deferral	-1 or -2 notches depending on maturity, subordination and coupon deferability	Generally -2 notches, of which -1 for subordination and -1 for coupon deferral

<sup>(1)</sup> Effective Maturity = Call date on which the issuer faces a particularly strong incentive to call (coupon step-up >25bp)

<sup>(2)</sup> Effective Maturity = Call date on which the issuer faces a particularly strong incentive to call (coupon step-up >100bp)

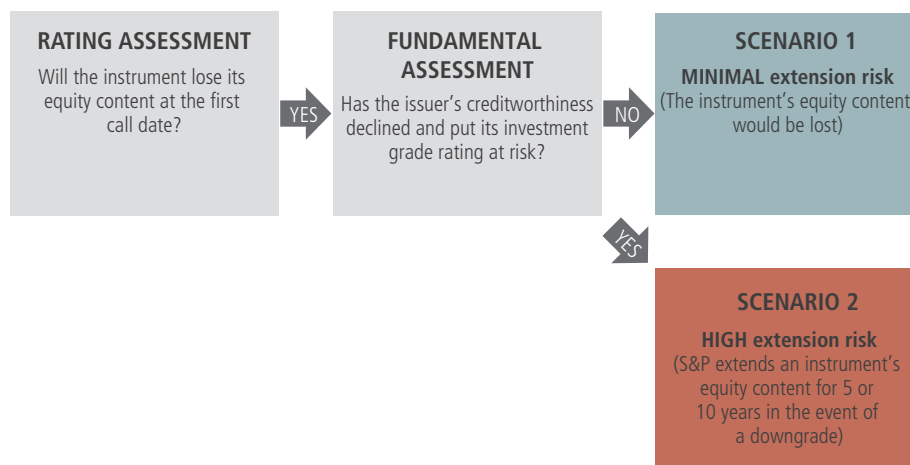
Source: Standard & Poor’s, Moody’s, Fitch, Neuberger Berman.

Moody's, for example, removes it 10 years before the hybrid's maturity date. For S&P, equity content lasts until 20 years before the hybrid's "effective maturity," which is the sooner of (i) the instrument's actual maturity date or (ii) the date when the hybrid's "step-ups" (punitive raises in the coupon that occur if the instrument is continually left outstanding) have accumulated to 100 basis points or higher.

European issuers, which have historically dominated this market,<sup>1</sup> have tended to structure hybrids to align with S&P's methodology: their coupons generally step up to 100 basis points after 25 or 30 years, which means that S&P's "effective maturity" and loss of equity content coincides with the hybrid's first call date in year five or 10. The equity content is one of the most attractive features for a hybrid issuer, so losing it creates a strong incentive to call the instrument on the first call date: failure to call leaves the issuer with straight subordinated debt, without any rating benefit, whose coupon has "stepped up" from an already relatively high level.

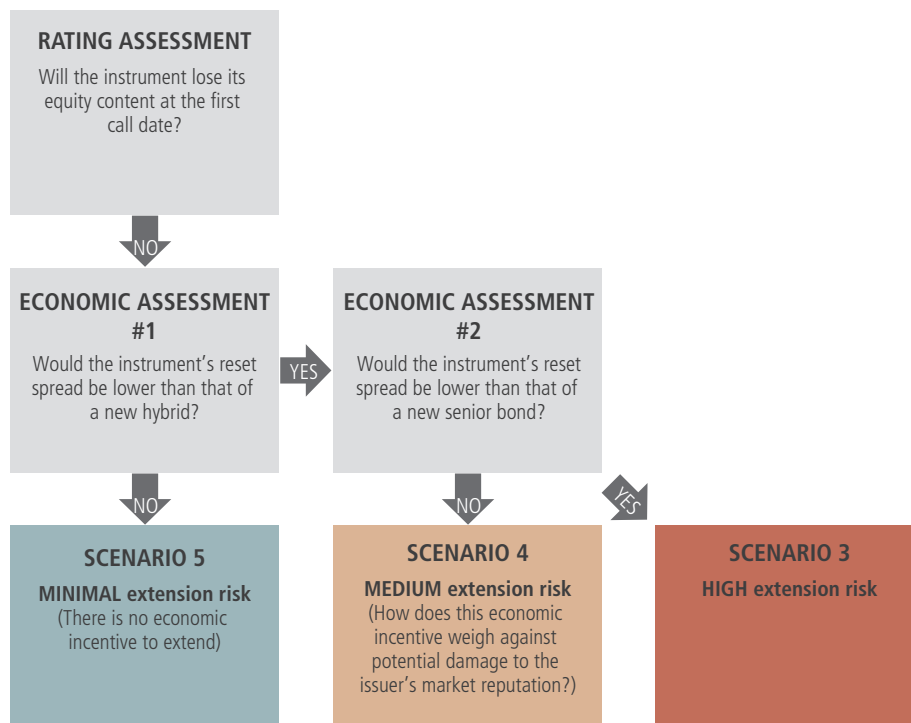
Effectively, this has made the fate of a hybrid's equity content from the rating agencies one of the most important determinants of extension risk, with S&P's approach becoming the standard and the main line of defense against extensions.

**Where equity content is removed after a hybrid's first call date,** as it is for S&P-rated hybrids and some Fitch-rated hybrids, extension risk is low. Exceptions usually concern issuers whose investment grade rating has been lost or is at risk. As shown in figure 1, S&P allows non-investment grade issuers to retain the equity content of their hybrids for longer—an extra five years for BB issuers and an extra 10 years for those rated B or lower. Therefore, the risk of extension depends largely on an assessment of the issuer's fundamental creditworthiness.



<sup>1</sup> For signs of the growing importance of the U.S. hybrid market, and its convergence on European standards, see Linus Claesson and Robin Usson, "Corporate Hybrids Take the World Stage" (May 2024), at <https://www.nb.com/en/link?type=article&name=whitepaper-corporate-hybrids-take-the-world-stage>.

**When equity content can be retained beyond the first call date**, which is rare for European hybrids but more common among U.S. instruments, extension risk can be higher and depends on the issuer's purely economic incentives: if the hybrid's "reset" spread, after coupon step-ups, is narrower than the spread for either a new hybrid instrument or new senior debt—which would be determined in large part by the issuer's current credit fundamentals—the incentive to extend is high.



In short, credit fundamentals matter in corporate hybrids. When equity content would be removed at the first call date, it can make the difference between minimal and high risk of extension. During the rapid tightening of financial conditions in 2022 – 2023, for example, many investors were surprised by the first-ever extension of a European-style hybrid security, issued by an investment grade-rated issuer in the Real Estate sector.

For these reasons, we think prudent investors in hybrids should follow our own practice at Neuberger Berman and overlay these first steps in assessing extension risk with a deeper analysis of issuers' cash flows, balance sheet, capital structure and related accounting matters.

### **Beyond the Bond: Spotting Extension Risk by Peeling the Equity Layer**

Over the past two years, as interest rates have risen, notable asset write-downs have eroded the equity bases of many companies across various industries. While this has become a pressing problem only for investors in hybrids in the Real Estate sector, such erosion raises risks for hybrid investors in general, as they stand next in line above that loss-absorbing equity buffer. That is why we believe a full and accurate assessment of the nature and robustness of that equity buffer—what high-yield investors call the "equity cushion"—is such an important step for hybrid investors to take.

How much leverage does a company have? The most common assessment looks at the ratio of debt to equity, or the ratio of debt to earnings that accrue to equity.

But how much *equity* does a company have? That seems like a simple question, but the usual answer—the amount of consolidated equity in the company—ignores that not all equity is equal. Consolidated equity includes the value of all the common shares, together with retained earnings and other reserves, but also the “equity” attributable to preferred shares, perpetual notes and, yes, hybrid instruments, as well as the minority interests held by external shareholders of the company’s subsidiaries.

A company’s leverage ratio is calculated using that consolidated debt, but in reality only the value of the parent company’s common shares, retained earnings and other reserves constitute the “true” loss-absorbing equity cushion. The parent company’s common shareholders cannot draw upon the other equity. In our view, that results in “hidden leverage”: a company with a debt-to-consolidated equity ratio of 40% might be carrying a “true” leverage ratio, based solely on the parent company shareholder’s equity, of 50% or more.

That, of course, is one of the reasons issuers like hybrids so much: they add debt capital, but don’t push up standard leverage ratios as much as a senior bond issue would. But if hybrid capital becomes a disproportionately large part of consolidated equity and times get tough for one of these issuers, both the issuer and its hybrid investors can face difficult choices when first call dates come around.

As the issuer’s earnings and the value of its assets decline while the value of its outstanding debt remains the same, its leverage ratio rises. Among the few things stopping that leverage ratio from rising even faster is the fact that the value of its outstanding hybrid capital—considered 50% equity by the rating agencies—remains the same. Ordinarily, with the equity content due to be removed after the first call date, that would increase the issuer’s incentive to call the instrument and refinance it. However, tougher times are precisely when access to capital markets becomes more difficult and the spread on a new senior bond might be higher than the reset spread of the hybrid, leaving the issuer with little choice, or a strong economic incentive, to extend the instrument as straight subordinated debt.

This is what happened in December 2022, when a German diversified real estate company became the first European investment grade issuer not to redeem its hybrid at the first call date.

In figure 2, we show how the equity portion of that company’s capital structure evolved leading up to that date. As interest rates rose rapidly in 2022 and real estate values were written down, the value of the company’s total consolidated equity declined by 7%. But the equity attributable to the parent company common shareholders declined by 9%. The difference was due to the stable value of the equity attributable to the company’s hybrid capital. Moreover, this was just the tip of an iceberg: the proportion of the consolidated equity attributable to hybrid capital and non-controlling minority interests had more than doubled since 2016.

Having lost access to the capital markets due to this rising leverage, the issuer was unable to call and refinance its hybrids with either a new hybrid or senior debt. Even if it could have refinanced with senior, the market was now pricing its senior bonds at such a wide spread that it would still have been cheaper to extend the hybrid as straight subordinated debt. At the same time, the incentive to maintain the stable hybrid equity capital, now a huge 27% of consolidated equity, and thereby avoid a large further jump in leverage ratios, was overwhelming—for both the issuer and the hybrid investors. In the end, the issuer squared this circle by offering to exchange the extended hybrid for a new one on similar terms, retaining the hybrid equity capital while effectively pushing the first call date out by another five years.<sup>2</sup>

Compare the history of this issuer’s equity structure with that of the Nordic diversified real estate hybrid issuer also shown in figure 2. Despite facing similar economic pressures, this company redeemed some of its outstanding hybrid capital at its first call date in 2022. This issuer had a comparable level of leverage as measured by net debt to earnings, but equity not attributable to parent company common shareholders stood at just 20%, and the proportion of hybrid equity at just 9%, coming into 2022. This company’s “true” leverage was much more sustainable than the German issuer’s, and its hybrid equity a much smaller proportion of its consolidated equity. Therefore, even if the issuer had lost its investment grade rating, any incentive to extend would have been very weak when weighed against the resulting reputational damage.

<sup>2</sup> Had S&P downgraded this issuer’s debt to below investment grade before the hybrid’s first call date, under its policy regarding effective maturity and equity content (see figure 1), it would also have lengthened by at least five years the period over which the instrument’s equity content is retained. Under these circumstances, the combination of the hybrid becoming a disproportionate share of consolidated equity and the ability to extend without losing the equity content would be an overwhelming incentive not to call the instrument. This investment grade issuer’s extend-or-exchange offer achieves effectively the same result, without the downgrade: unless existing investors refuse the offer and are content to hold the deeply subordinated debt of a now even more highly leveraged company, they are left holding substantially the same hybrid instrument, which now has another five years until the first call date.

**FIGURE 2. HOW A DECLINE IN NON-HYBRID EQUITY INCENTIVIZED A HYBRID EXTENSION**

Equity structure of a German diversified real estate hybrid issuer, €bn

Equity Structure	2016	2017	2018	2019	2020	2021	2022	2023
<b>Book Value</b>								
Equity attributable to Owners	3,090	3,090	7,830	9,586	10,425	10,534	9,585	7,643
Equity attributable to Corporate Hybrids	478	478	1,548	2,484	3,133	4,748	4,748	4,757
Non-controlling Interests	373	373	567	1,309	2,025	3,875	3,490	2,750
<b>Total Equity</b>	<b>3,941</b>	<b>3,941</b>	<b>9,944</b>	<b>13,379</b>	<b>15,583</b>	<b>19,156</b>	<b>17,823</b>	<b>15,150</b>
Equity attributable to Owners	78%	78%	79%	72%	67%	55%	54%	50%
Equity attributable to Corporate Hybrids	12%	12%	16%	19%	20%	25%	27%	31%
Non-controlling Interests	9%	9%	6%	10%	13%	20%	20%	18%
<b>Equity non-attributable to owner</b>	<b>22%</b>	<b>22%</b>	<b>21%</b>	<b>28%</b>	<b>33%</b>	<b>45%</b>	<b>46%</b>	<b>50%</b>

Year of extension

Equity structure of a Nordic diversified real estate hybrid issuer, SEKbn

Equity Structure	2016	2017	2018	2019	2020	2021	2022	2023
<b>Book Value</b>								
Equity attributable to Owners	27,939	31,295	40,146	49,011	58,209	77,606	90,194	82,313
Equity attributable to Corporate Hybrids	-	3,447	3,596	3,652	3,513	8,693	4,942	4,435
Non-controlling Interests	5,540	6,422	7,262	9,714	9,676	10,961	12,715	11,674
<b>Total Equity</b>	<b>33,479</b>	<b>41,164</b>	<b>51,004</b>	<b>62,377</b>	<b>71,398</b>	<b>97,260</b>	<b>107,851</b>	<b>98,422</b>
Equity attributable to Owners	83%	76%	79%	79%	82%	80%	84%	84%
Equity attributable to Corporate Hybrids	0%	8%	7%	6%	5%	9%	5%	5%
Non-controlling Interests	17%	16%	14%	16%	14%	11%	12%	12%
<b>Equity non-attributable to owner</b>	<b>17%</b>	<b>24%</b>	<b>21%</b>	<b>21%</b>	<b>18%</b>	<b>20%</b>	<b>16%</b>	<b>16%</b>

Source: Neuberger Berman.

S&P will not attribute equity content to a hybrid if it pushes the hybrid capital layer above 15% of the issuer's total capitalization because it does not regard a hybrid as pure equity, but as a debt instrument with equity like features and lower levels of loss absorption. For the reasons described above, we think investors should go a step further by focusing on the issuer's equity structure rather than its total capitalization.

#### FACTOR 1

<p><b>1a. What proportion of consolidated equity is not attributable to common shareholders?</b></p> <p>&lt;=25% <b>MANAGEABLE</b>  25 – 40% <b>CAUTION</b>  &gt;40% <b>RED FLAG</b></p>	<p><b>1b. What proportion of consolidated equity is attributable to hybrid capital?</b></p> <p>&lt;=15% <b>MANAGEABLE</b>  15 – 30% <b>CAUTION</b>  &gt;30% <b>RED FLAG</b></p>
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In our view, if the proportion of consolidated equity not attributable to parent company common shareholders stays below 25%, extension risk is likely to be manageable through the cycle. However, as this proportion grows beyond 25%, the risk for parent company shareholders increases significantly—raising the incentive to extend or exchange (to retain stable equity in the capital



structure) or defer coupons (to retain cash). Between 26% and 40%, we advise caution and a closer monitoring of operational performance and sector fundamentals. Above 40%, we consider the “true” leverage to be perilous regardless of how reasonable the accounting leverage may look, substantially increasing the risk of a hybrid to its investor should the issuer come under stress.

We would also look at the proportion of consolidated equity attributable specifically to hybrid capital: we consider 15% or less manageable; between 16% and 30% warrants caution, in our view; and anything above 30% we would regard as a red flag.

## Market Versus Book Values: Bypassing the Accounting Depreciation Conundrum

So far, we have been thinking about equity in terms of book value. That makes sense when we consider real estate companies because, under IFRS, investment property held for sale is not depreciated. In other sectors, most assets are depreciated, resulting in potentially large differences between equity’s book value and market value. Outside of the Real Estate sector, in particular, we think the market capitalization attributable to parent company common shareholders provides a better gauge of the equity cushion than the book value.

We can see this in figure 3, where we show the evolving equity structure of a hybrid issuer in the Consumer sector through both lenses. Book value indicated a hidden risk of hybrid extension, under our guidelines set out above, should the call date fall during a time of hardship for the company. However, based on market value, only around 10 – 15% of the consolidated equity, at worst, was not attributable to the parent company’s common shareholders—a proportion that raises few concerns for hybrid investors given the comfortable amount of loss-absorbing capital underneath them.

**FIGURE 3. MARKET CAPITALIZATION PAINTS A DIFFERENT PICTURE OF EXTENSION RISK THAN BOOK VALUE**

Equity structure of a Consumer-sector hybrid issuer, €bn Book Value

Equity Structure	2016	2017	2018	2019	2020	2021	2022	2023
<b>Book Value</b>								
Equity attributable to Owners	1,027	1,443	1,669	1,839	2,690	3,648	4,199	4,078
Equity attributable to Corporate Hybrids	600	1,000	1,000	1,000	1,000	1,000	583	1,000
Non-controlling Interests	129	39	53	60	26	30	69	60
<b>Total Equity</b>	<b>1,757</b>	<b>2,482</b>	<b>2,722</b>	<b>2,898</b>	<b>3,716</b>	<b>4,677</b>	<b>4,851</b>	<b>5,137</b>
Equity attributable to Owners	58%	58%	61%	63%	72%	78%	87%	79%
Equity attributable to Corporate Hybrids	34%	40%	37%	35%	27%	21%	12%	19%
Non-controlling Interests	7%	2%	2%	2%	1%	1%	1%	1%
<b>Equity non-attributable to owner</b>	<b>42%</b>	<b>42%</b>	<b>39%</b>	<b>37%</b>	<b>28%</b>	<b>22%</b>	<b>13%</b>	<b>21%</b>

Equity structure of a consumer-sector hybrid issuer, €bn Market Value

<b>Market Value</b>								
Market Cap	6,855	8,956	5,787	8,848	13,094	20,917	12,925	10,139
Equity attributable to Perps	600	1,000	1,000	1,000	1,000	1,000	583	1,000
Non-controlling interests	129	39	53	60	26	30	69	60
<b>Total Market Equity</b>	<b>7,584</b>	<b>9,995</b>	<b>6,840</b>	<b>9,907</b>	<b>14,120</b>	<b>21,947</b>	<b>13,577</b>	<b>11,199</b>
Equity attributable to Owners (MV)	90%	90%	85%	89%	93%	95%	95%	91%
Equity attributable to Perps (BV)	8%	10%	15%	10%	7%	5%	4%	9%
Non-controlling interests (BV)	2%	0%	1%	1%	0%	0%	1%	1%
<b>Equity non-attributable to owner (MV)</b>	<b>10%</b>	<b>10%</b>	<b>15%</b>	<b>11%</b>	<b>7%</b>	<b>5%</b>	<b>5%</b>	<b>9%</b>

Source: Neuberger Berman.

## Cash Flows, Complex Capital Structures and Hybrid Sustainability

Finally, having highlighted the importance of analyzing all aspects of an issuer's capital structure when assessing its leverage, we will highlight the same thing when it comes to assessing whether cash flows adequately cover the issuer's hybrid cash costs. If this coverage comes into question, it can raise the risk of both extension and coupon deferral.

When we analyze this risk, we generally favor the Funds From Operations (FFO) cash-flow metric over other metrics, such as Free Cash Flow (FCF), because it smooths out period-over-period variation in working capital and capital expenditure.<sup>3</sup> It can be problematic for certain working capital-intensive sectors such as Retail, but it works well for the sectors that tend to issue hybrids: Utilities often experience large, distorting variations in working capital due to their hedging programs, for example.

S&P publishes FFO calculations for many issuers via S&P CreditStats Direct. However, it is important to note that, because S&P attributes 50% equity content to hybrids, it accounts for only 50% of any hybrid coupons in its FFO calculations. We think investors using the S&P FFO metric to assess the coverage of hybrid liabilities should adjust it by incorporating the cost of financing of the entire debt structure—that is, the full hybrid coupon payment as well as the cash interest on secured and unsecured debt. An "Adjusted FFO" metric would look like this:

### Using S&P FFO:

S&P FFO  
Less Additional 50% Hybrid Coupon  
**= Adjusted FFO**

### Starting From Scratch:

EBITDA  
Less Cash Interest (Cost of Debt)  
Less Cash Taxes  
Less Hybrid Interest (Cost of Hybrid)  
Less Other Adjustments  
**= Adjusted FFO**

We believe there are thresholds over which the ratio of hybrid coupon payments to Adjusted FFO becomes a cause for concern, just as we did when assessing the risk associated with disproportionate hybrid and minority-interest equity.

## FACTOR 2

What proportion of Adjusted FFO is consumed by hybrid coupon payments?

<b>&lt;=5%</b>	<b>MANAGEABLE</b>
<b>5 – 10%</b>	<b>CAUTION</b>
<b>&gt;10%</b>	<b>RED FLAG</b>

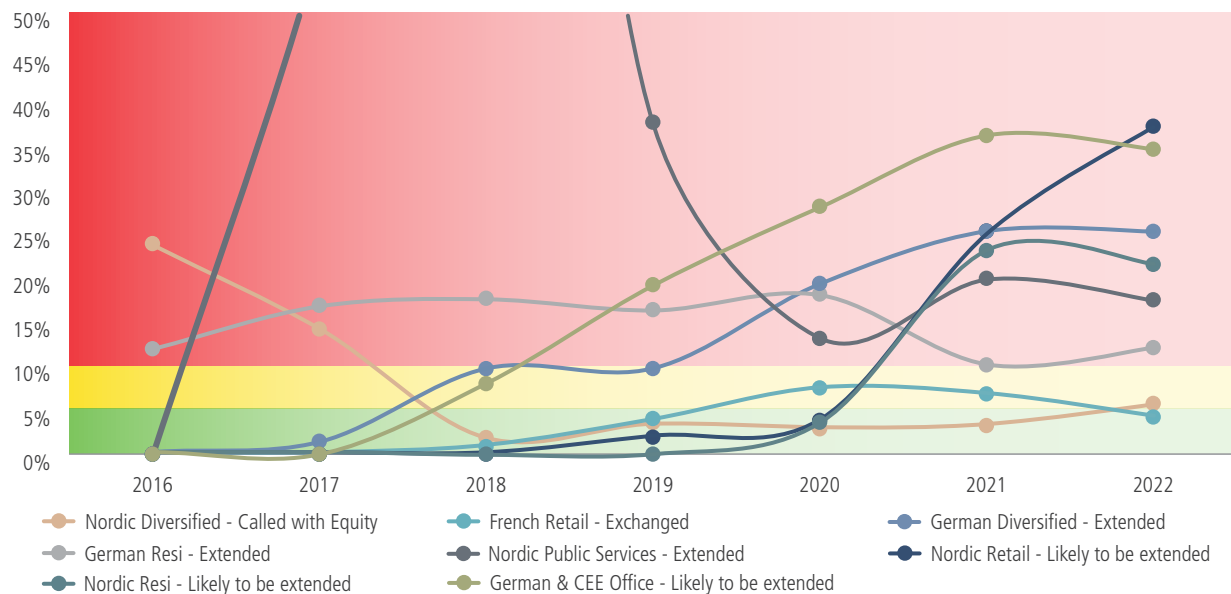
In our view, hybrid coupon payments below 5% of Adjusted FFO are likely to be sustainable through the cycle. A ratio between 5% and 10% requires caution and close monitoring of short-term operational performance. Above 10%, however, we think the risk for hybrid investors is significantly higher: at these levels, any deterioration in cash flows could cause shareholders to decide that replacing an existing hybrid with a new issue, or even meeting existing hybrid liabilities, is too expensive. While extending a hybrid may result in a loss of its equity content and a step-up in its coupon, with this deterioration in creditworthiness the existing hybrid could still be cheaper than a new hybrid or even new senior debt.

<sup>3</sup> S&P, which published FFO calculations via S&P CreditStats Direct, describes FFO as "a hybrid cash flow measure that estimates a company's inherent ability to generate recurring cash flow from its operations independent of working capital fluctuations. FFO estimates the cash flow available to the company before working capital, capital spending, and discretionary items such as dividends, acquisitions, etc." <https://disclosure.spglobal.com/ratings/en/regulatory/article/-/view/sourceId/8314109>.

In figure 4, we look at the Real Estate sector, which has suffered notable stress in cost structures and revenue profiles over the past two years, and begin to see the significance of this 10% threshold for hybrid coupon payments as a ratio of Adjusted FFO. Just two out of eight real estate hybrid issuers stayed below that ratio between 2016 and 2022, and they both called their hybrids at the first call dates and replaced them with equity or a new hybrid. Two of the others have already extended their hybrids—including the German issuer described above. One refinanced with a hybrid with a lower coupon reset level, which we consider to be unsustainable.<sup>4</sup> We regard the remaining three to be at high risk of extension.

**FIGURE 4. EXTENSION RISK RISES WHEN HYBRIDS CONSUME DISPROPORTIONATE CASH FLOW**

Issuer's hybrid coupon payments as a percentage of Adjusted FFO

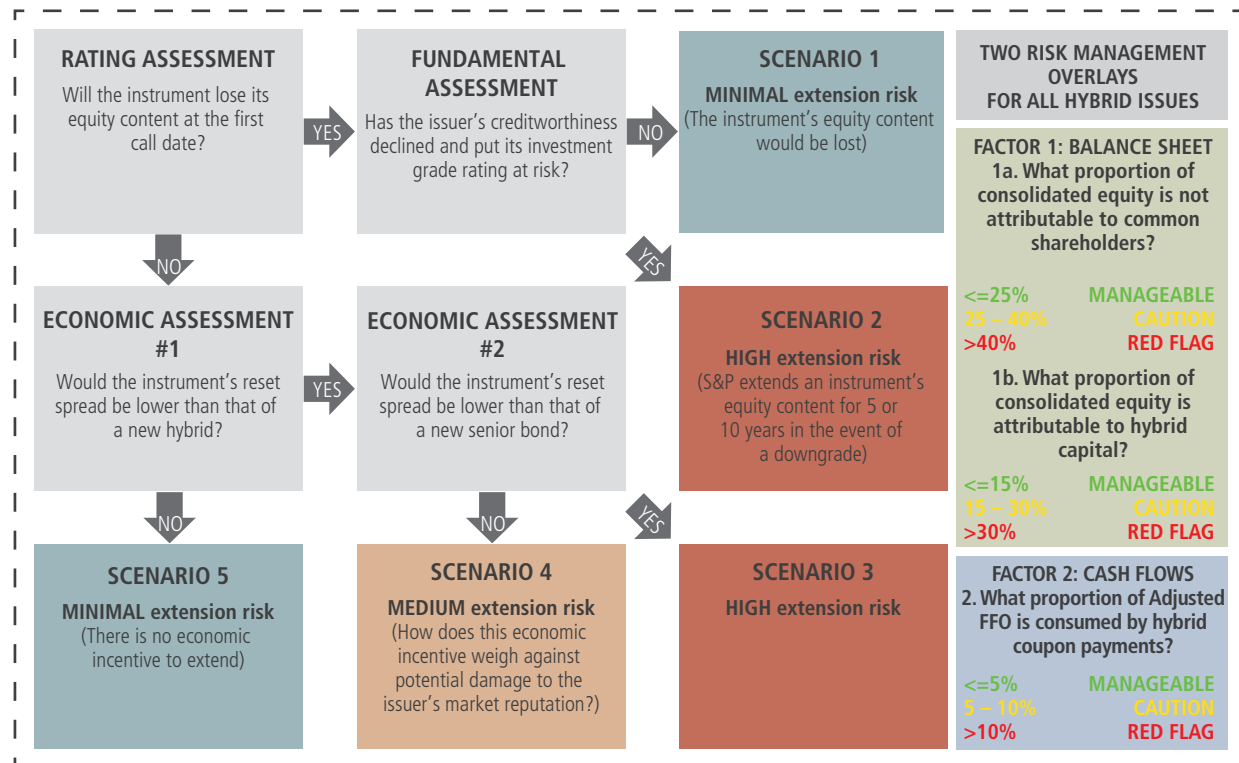


Source: Standard & Poor's, Neuberger Berman.

<sup>4</sup> An extension in these circumstances is not a certainty. Indeed, we have seen at least one recent instance of a stressed issuer calling and replacing a hybrid with a new issue with a *lower* coupon reset level. Investors appear to have seen this willingness to call as a sign of long-term commitment to the asset class, and they therefore assume the new hybrid will also be called at its first call date. We are deeply skeptical. In our view, such an issuer is committed to hybrids only because the equity content offers temporary cover for the true deterioration in its creditworthiness. We think it likely that these issuers will be forced to defer coupons and ultimately fail to call the new instrument. Because it leaves investors carrying even greater risk in exchange for smaller reward, we regard this outcome as akin to an extension.

Market dynamics, sector-specific cycles and unique company factors all play a role in shaping extension risk. For all the reasons set out above, as additional extension risk management we advocate in-depth analysis of issuers' equity structures based on both book value and market value, and consideration of the proportion of issuers' cash flows that are consumed by hybrid coupon payments.

#### A SIMPLIFIED DECISION TREE FOR ASSESSING EUROPEAN HYBRID EXTENSION RISK



#### Hybrid Extension Risk: Looking Beyond Structure and Basic Economic Incentives

Fixed income investing at Neuberger Berman is driven by a focus on fundamental bottom-up credit research. Our work in corporate hybrids is no exception, and we believe this is unusual in a sector dominated by high-quality, investment grade issuers, where investors tend to focus on the risks associated with the hybrid structure rather than the issuer's creditworthiness.

In this article, we have sought to demonstrate that deteriorating issuer creditworthiness has in fact been a root cause of the recent rise in hybrid extension risk in the Real Estate sector. We have explained why this factor tends to be overlooked as a source of "hidden" extension risk, and described analytics that can help investors spot it.

Extension risk remains a tail risk, particularly in the European hybrids market where investor and issuer incentives are highly aligned. Nonetheless, extension is and always had been an option afforded to hybrid issuers. We believe credit selection that takes account of the complexity of issuers' equity structures and the resilience of issuers' cash flows can help build portfolios in which this issuer optionality remains deeply out of the money. By managing tail risk with fundamental credit analysis rather than diversification alone, we believe it can also help investors build more concentrated, high-conviction hybrid portfolios.

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