# **Junior-Subordinated Capital Securities Markets**

### December 2023 Updates

The US Treasury bond market completed its 2<sup>nd</sup> biggest two-month rally since 2011's risk-off move on Europe's sovereign crisis as the mood continued to be jubilant over the Fed's indication that it is done raising rates. As a result, the bond market has priced in 6 rate cuts by the end of next year with the first cut being as early as March. The UST 10yr note rallied (in following the path of Dec-24 SOFR futures) 3.67% in December (which followed a 4.44% rally in November) as traders further cheered the Fed's "pivot party". We said last month that there had been 7 times over the last 23yrs when the UST10yr price had rallied over 4% in a calendar month (2.6% of the time) – in each month that followed, the UST10yr price has declined to consolidate the 2 standard deviation move. But it was different this (8<sup>th</sup>) time as the Fed had a surprisingly dovish tone, evidenced by reducing the median federal funds rate in its "dot report" by another 50bps to 4.625% despite saying that it will "take some time for inflation to return to its 2% goal" and "inflation is still too high". So, the Fed puts emphasis on rates being "higher for longer", but it clearly thinks that rates do not need to be as restrictive as they are "well into restrictive territory". The spread between UST2yr notes and UST10yr notes further inverted this month (after closing the 2<sup>nd</sup> quarter at its lows of -107) by another 1bp to -37bps – note that the average slope of the US Treasury 2s-10s yield curve has been 113bps since Dec-1999 with a high of +281bps (and a low of -107). The 30yr bond closed the month yielding 4.05% (44bps lower) and the 10yr note closed yielding 3.87% (46bps lower). Real rates on the front end of the treasury curve (e.g., UST 5yr TIPS) fell by 40bps (to 1.71%); the 5yr implied breakeven inflation rate (i.e., the difference in yields between the 5yr UST and the 5yr Treasury Inflation Protected Security) declined by 1bp to close at 2.16%. We continue to emphasize that the Fed must deal with a very challenging conflict between ongoing excess fiscal spending not

being aligned with the Fed's seemingly urgent disinflationary goal. Another government shutdown looms this month over excess spending. The effect of massive fiscal excess, zooming treasury debt costs and quantitative tightening still risks a "fiscal fit" (or some evident concern expressed by lower UST bond market prices challenging Congress to gain control) causing a correction in the real rate rally on the US Treasury term structure; and the Fed's (subtle) acceptance of 3% inflation rather than 2% inflation over time. The Fed has paused now since the end of July and as this period of no change lengthens, the Fed's policy card will focus more on financial conditions and the "neutral rate" elevating than it will on needing a series of 6 sudden rate cuts while inflation is still high and the committee is in the soft landing camp. Equity prices measured by the S&P 500 zoomed another 4.4% higher in December while the VIX (i.e., Chicago Board Options Exchange Volatility Index) fell 3.64% to 12.45 which was among the lowest scores of the year. Financial conditions are stellar, stimulative and closed on a high for the year.

Before we talk hybrids, the performance for comparative references on returns and yield changes in some of the other corporate credit sectors is shown below:

- The junk market (measured by the ICE BofA High Yield *h0a0* index) rose 3.69% to close yielding 7.64% (86bps lower).
- Global bank credit (measured by ICE BofA *e0ba* index) rose 3.07% to close yielding 5.21% (55bps lower).
- The BBB rated 5-10yr corporate sector (measured by ICE BofA *c6a4* index) rose 4.18% to close yielding 5.29% (62bps lower).

#### **Review of Market Structure:**

The market for **hybrids** or **global junior-subordinated capital securities** (*i.e.,* "**Jsubs**") is comprised of two core sectors:

- 1. Preferred Securities, and
- 2. Contingent Capital Securities

Each sector has evolved with unique technical, structural, and fundamental features that are discussed and updated below:

Global Jsubs comprise <u>two sub-sets</u> that represent a broad group of hybrids, which can be referenced by two **ICE BofA indexes**: 1) The <u>ICE BofA US All Capital Securities Index</u> (*iOcs*), and 2) The <u>ICE BofA US Dollar Contingent Capital Index</u> (*cdlr*).

Our litmus test for hybrids satisfies two core characteristics:

- 1) any non-payment of distributions would <u>not</u> accelerate an event of default (i.e., distributions are "junior-subordinated" to ordinary interest obligations) and,
- **2)** balance sheet classification is something other than common stock under GAAP disclosure.

The US All Capital Securities (*iOcs*) benchmark of preferred securities represents \$314 billion (face amount) of investment grade and below investment grade instruments in both the retail \$25par market (36%) and the institutional \$1,000par market (64%). The USD Contingent Capital Index of US dollar denominated hybrids (*cdlr*) sums to \$139 billion (face amount) of investment grade and below investment grade fixed-rate instruments with contractual triggers that could subordinate them to common stock in a reorganization that would not fall into a receivership after the bail-in. These two benchmarks combine for a \$453 billion universe of fixed-rate junior subordinated USD capital securities with preferred securities (measured by *iocs*) being a 69% subset and contingent capital securities (measured by *cdlr*) being a 31% subset of the total global USD junior subordinated group.

#### **Preferred Securities**

In the preferred securities sleeve, there are four sub-component indexes in the US All Capital Securities Index (*iOcs*) – this entire index is comprised of global "preferred securities". A

**"preferred security"** can represent a capital security issued either through charter amendment (i.e., as a stock) or through indenture (i.e., as a bond) typically within the context of a "<u>gone</u> <u>concern</u>" statutory authority (*e.g.*, US banks). As a gone concern, a company reorganization would be processed through a bankruptcy court. Preferred security payments are in priority to common stock dividends, yet can be deferred (i.e., payments are cumulative) or eliminated (i.e., payments are non-cumulative) without causing an immediate event of default; any principal loss absorption on a preferred security would be forced only *ex-post* through a statutory resolution in a bankruptcy proceeding.

<u>The four sub-components of the *iOcs* benchmark</u> that consolidate into the retail and institutional sectors of rated preferred securities are:

1) ICE BofA Fixed Rate Preferred Index (*p0p1*) @ 42% of iOcs

#### o Comprised of IG \$25par and IG \$1,000par (incl. US AT1)

- The *p0p1* rose 2.77% this month to close yielding 6.29% (-54bps)
- 2) ICE BofA US Capital Securities Index (c0cs) @ 23% of i0cs
- o Comprised of dated IG \$1,000par dated hybrids (excl. US AT1)

The *c0cs* rose 3.46% this month to close yielding 6.62% (-66bps)

- 3) ICE BofA High-Yield Capital Securities Index (h0cs) @ 6% of i0cs
- o Comprised of BIG \$1,000par legacy Tier1 and BIG \$1,000par hybrids
  - The *h0cs* rose 5.23% this month to close yielding 7.33% (-81bps)

#### 4) ICE BofA High Yield Fixed Rate Pfd Index (p0hy) @ 29% of i0cs

- o Comprised of BIG \$25par and BIG 1,000par (incl. US AT1)
  - The *p0hy* rose 3.18% this month to close yielding 8.33% (-48bps)

The ICE BofA All US Capital Securities Index (*iOcs*) zoomed up 3.19% this month to close yielding 6.91%, which was 57bps lower than last month's closing yield and a spread of +288bps over comparable US Treasury securities (11bps tighter).

#### **Contingent Capital Securities**

A "contingent capital security" (i.e., a "CoCo") represents a capital security issued through indenture typically within the context of a "going-concern" type regulatory regime for banking, which would reorganize a potentially insolvent bank through the contracts of its capital before falling into a conservatorship proceeding. CoCos payments are non-cumulative and *pari passu* to common stock dividends and can be reduced or eliminated without causing an event of default. Principal loss absorption on a CoCo could be forced ex-ante through a regulatory action in advance of any bankruptcy proceeding (note that an actual bankruptcy may not happen because enough loss absorbing bail-in capital, including tier-2 capital, could be available through the "living will" of the entity's core capital). The ICE BofA USD Contingent Capital Index (*colr*) is comprised of US dollar denominated constituents (exclusively), which represent 58% of the mature master multi-currency benchmark (*coco*). We will utilize the USD benchmark (*cdlr*) as it more meaningfully reflects the contingent capital currency primarily held in our portfolios. **The ICE BofA USD Contingent Capital Index (***cdlr***) rose 3.58% this month to close yielding 7.56%, which was 80bps lower than last month and a spread of +341bps over comparable US Treasury securities (40bps tighter).** 

#### Discussion of Retail and Institutional Sectors:

We report on the retail and institutional sectors using statistical tables in a *Spread Value Matrix* to provide readers with data on absolute and relative spread positionings. The data samples are sourced from ICE BofA benchmarks starting in March 2017, which is when retail benchmark calculations on yield-to-worst for currently callable \$25par preferred securities were improved

to reflect actual yields, even if negative. We provide measures of inflation coverage in a *Purchasing Power Matrix*; and a table for yield-to-worst, net of inflation and of historical default in a *Real Yield Matrix* that compares hybrids, investment grade corporates and high yield bonds. Finally, we show data on prior credit cycles for each sector to give you a *Comprehensive Risk Estimate* to the average bottom of the last 3 credit cycles (2013, 2016 and 2018) -- the rationale here is to illustrate risk measures relative to prior down credit cycles, but not necessarily an outlook to that direction. By following these tables monthly (and sometimes as "pop-outs" in flash reports), investors should gain consistent insights to assist in making more informed and supportive asset allocation decisions using junior subordinated capital securities. Each signal is intended to be independently supplementary to foster a more balanced value assessment for each sector.

	p0p4	p0p4-e0ba	stb8	stb8-e0ba	cdir	cdlr-e0ba
Capital Securities	(a)	(b)	(a)	(b)	(a)	(b)
Spread Value Matrix	Retail	Retail	NoCo	NoCo	CoCo	CoCo
Sample Periods	03/31/2017 to Date		03/31/20	017 to Date	03/31/2017 to Date	
Jr-Subs	*Absolute	**Relative	*Absolute	**Relative	*Absolute	**Relative
High	588	251	486	205	660	472
Low	-178	-267	176	60	223	143
Range	766	518	310	145	437	329
Average	77	-36	258	144	338	225
Stdev	118	101	48	27	63	37
Monthend	126	17	274	165	316	207
Spread Scores:						
(monthend-ave)/stdev	0.42	0.52	0.33	0.78	-0.35	-0.49
Δ from Last Month	0.10	0.19	-0.44	-0.44	-0.52	-0.65

#### **Snapshot of Junior Subordinated Spread Sector Moves vs. Global Financials:**

Source: Bloomberg; ICE BolA Bond Indices

\* Absolute = Option Adjusted US Government Spread; (current-ave)/stdev

\*\* Relative = spread to global financials measured by e0ba ICE Bond Index; (current-ave)/stdev

Here, we look at <u>option adjusted spread</u> (OAS) to haircut spread to comparable US Treasuries for interest rate volatility and time to expiry. The way we interpret the above option adjusted spread table is by the statistical positioning of the *Spread Scores* where, **zero** = "fair value", +/-**1stdev.** = "undervalued"/ "overvalued", respectively and +/- **2stdevs** = "very undervalued"/ "very overvalued", respectively.

Spread performance for hybrids this month was negative for all three sectors with NoCo spread performance widening the most. The Absolute Spread Score on retail paper tightened by 0.54 standard deviations; **the \$25par sector** is *min-fair valued* with a Spread Score of 0.42 standard deviations from average. The Absolute Spread Score for the institutional \$1,000par preferred securities sector ("NoCos") tightened by 0.63 standard deviations; NoCos are *min-fair valued* with a Spread Score of 0.33 standard deviations from average. The Absolute Spread Score are *min-overvalued* with a Spread Score of 0.44 standard deviations; CoCos are *min-overvalued* with a Spread Score of 0.35 standard deviations; CoCos are *min-overvalued* with a Spread Score of 0.35 standard deviations from average. Note that these statistical positionings provide an absolute and relative view on some historical spread, which can be further complimented with some cycle perspectives from the Comprehensive Risk Estimates below.

#### Implications of Market Activity:

#### \$25par Retail Preferred Securities Sector

The retail preferred securities sector measured by *p0p4* zoomed up \$1.57 to \$84.34 and the yield-to-worst fell by 35bps to 6.41% this month as the bond market and the equity market both experienced a continued melt-up after the Fed indicated more rate cuts are coming next year than indicated at the prior meeting. There was no retail sector issuance in December. The two largest \$25par passive ETFs (iShares Preferred and Income ETF, PFF; and Invesco Preferred ETF, PGX), had about \$228million of combined net money outflow this month. There seems to have been some tax switching activities as PFF grew by \$286mm, but PGX shrunk by \$58mm.

The overall retail \$25par sector closed the month up 2.52% on a year-to-date basis. This month's Estimated Price Risk to Average Current Yield is relatively low, but not nearly as low as it was two months when we noted that it was the lowest (i.e., most positive) it had been since we have been following the measure. The current yield is now 24bps less than the average current yield for the past 3 credit cycles, so if we experience a regression to the mean current yield over the next 12 months it would imply a 3.00% price loss. There is always a Fed cycle associated with the credit cycle, but no cycle is exactly like prior cycles because economic factors that cause credit spread differences change. Given that spreads in retail preferreds are a bit wider this month at 0.42 standard deviations wide of average, it appears that most of the higher yields in the retail market are explained by elevated US treasury yields than by credit concerns.

Retail Pfds.	Va	luation Implo	sions	Average		Diff. to	
Credit Cycle Bottoms >	2013	<u>2016</u>	<u>2018</u>	Prior Bottoms	Current	Average	
GA10	2.98%	1.64%	2.74%	2.45%	3.89%	1.44%	
PCE DEFY	1.48%	0.59%	1.86%	1.31%	2.60%	1.29%	
Real UST10yr	1.50%	1.05%	0.88%	1.14%	1.29%	0.15%	
\$25Coupon	6.64%	6.46%	6.05%	6.38%	5.46%	-0.92%	
\$25Price	\$94.06	\$98.66	\$93.09	\$95.27	\$84.51	-\$10.76	
\$25Current Yield	7.06%	6.55%	6.50%	6.70%	6.46%	-0.24%	
Mdur Worst	9.52	10.44	10.95	10.30	12.45	2.15	
CY Spread vs. T10yr	▶ 4.08%	▶ 4.91%	P 3.76%	<b>▲ 4.25%</b>	▶ 2.57%	-1.68%	
Source: Bloomberg; ICE BofA	Bond Indices					-3.00%	Est. Price Risk to AveCY
				Comprehens	ive Risk Est.	3.46%	Est. Price Risk + CY
				Recapture F	Rate (yrs.)	0.46	Est. Price Risk / CY
							· · · ·
					Memo:	9.62%	Total Return YTD

The current yield of the retail sector closed the month at 6.46%, which was approximately 24bps lower than the average current yield at the bottom of the last three credit cycles. The current yield spread to the 10yr US Treasury note is 257bps which is 168bps less than the average spread of the last three credit cycle bottoms as retail preferred yields are high, but

spread is being "squeezed" by UST yields being high as well -- a gauge to yields being high is the discount price to the sector. The rebalanced dollar price of the retail sector is \$84.51 this month and \$10.76 lower than the average price of the prior bottoms, which means that there is significantly more convexity to the retail market during this cycle than there was during the prior cycles even though yields were mostly higher. The implication of a 0.24% current yield increase to 6.70% (the average current yield of the prior bottoms) is an estimated 3.00% price decline using the current modified duration of 12.45; then adding back a current book yield (assuming a 12month path) of 6.46% makes the *Comprehensive Risk Estimate* for returns in the retail sector positive at 3.46%. The assumed loss recapture rate with income is 0.46yrs. Overall, yields in the retail sector appear to be fair valued in the absolute and spreads appear min-fair valued compared to US Treasuries.

• Year-to-date, below investment grade (BIG) \$25pars have underperformed investment grade (IG) retail paper by 4.10%, which is 49bps wider than last month.

### \$1,000par Institutional Preferred Securities Sector

The \$1,000 par institutional sector of the preferred securities market rose \$2.74, and yieldsto-worst fell 70bps to 7.13% this month. The following table illustrates the institutional preferred securities sector's three prior credit cycles compared to closing valuations this month:

Institutional Pfds.	Va	luation Implo	sions	Average		Diff. to	]
Credit Cycle Bottoms >	2013	<u>2016</u>	<u>2018</u>	Prior Bottoms	Current	Average	
GA10	2.94%	1.75%	2.74%	2.48%	3.89%	1.41%	
PCE DEFY	1.17%	0.59%	1.86%	1.21%	2.60%	1.39%	
Real UST10yr	1.77%	1.16%	0.88%	1.27%	1.29%	0.02%	
Coupon	6.77%	6.43%	5.88%	6.36%	5.30%	-1.06%	
Price	\$103.96	\$99.62	\$97.23	\$100.27	\$94.17	-\$6.10	
Current Yield	6.51%	6.45%	6.05%	6.34%	5.63%	-0.71%	
Mdur Worst	5.90	5.23	4.64	5.26	3.95	-1.31	
CY Spread vs. T10yr	▶ 3.57%	▶ 4.70%	▶ 3.31%	▶ 3.86%	▶ 1.74%	-2.12%	
Source: Bloomberg; ICE BofA	Bond Indices					-2.80%	Est. Price Risk to AveCY
				Comprehensi	ive Risk Est.	2.82%	Est. Price Risk + CY
				Recapture F	Rate (yrs.)	0.50	Est. Price Risk / CY
					Memo:	9.31%	Total Return YTD

The current yield of the institutional preferred sector closed the month at 5.63%, which was 17bps lower than last month. The \$94.17 price of the NoCo sector is \$6.10 less than the average price over the last three credit cycles – the implication of the discount is an embedded **"pull toward par"** as time ages and the prospect of higher coupon resets approach becoming available in less than 4yrs on average. The current yield of the sector is 71bps less than the 6.34% average current yield at the bottom of the last three credit cycles. The implication of a 0.71% current yield increase to 6.34% (the average current yield of the prior bottoms) is an estimated 2.80% price decline using the modified duration of 3.95; then adding back a current book yield (assuming a 12month path) of 5.63% makes the *Comprehensive Risk Estimate* for the NoCo sector equal to a 2.82% horizon return to accept the risk, which is 83bps less than last month. It would take 0.50yrs to recapture this capital loss estimate with book income. We consider the NoCo sector to be a min-fair valued sector.

• Year-to-date, below investment grade (BIG) \$1000pars underperformed investment grade (IG) institutional paper by 1.42%, which was 90bps better than last month.

#### **Contingent Capital Securities Sector**

#### The CoCo sector rose \$2.85 to \$95.07 as yields-to-worst declined 80bps to 7.56% this month.

The following table illustrates the contingent capital securities sector's three prior credit cycles compared to closing valuations this month:

CoCo Securities	Va	luation Implo	sions	Average		Diff. to	
Credit Cycle Bottoms >	2013	<u>2016</u>	<u>2018</u>	Prior Bottoms	Current	Average	
GA10	3.01%	1.75%	2.88%	2.55%	3.89%	1.34%	
PCE DEFY	1.48%	0.59%	1.86%	1.31%	2.60%	1.29%	
Real UST10yr	1.53%	1.16%	1.02%	1.24%	1.29%	0.05%	
Coupon	7.63%	6.40%	6.78%	<b>6.94%</b>	6.38%	-0.56%	
Price	\$105.04	\$89.12	\$96.21	\$96.79	\$94.96	-\$1.83	
Current Yield	7.26%	7.18%	7.05%	7.16%	6.72%	-0.45%	
Mdur Worst	4.76	5.30	3.95	4.67	2.69	-1.98	
CY Spread vs. T10yr	▶ 4.25%	▶ 5.43%	▶ 4.17%	▶ 4.62%	2.83%	-1.79%	
Source: Bloomberg; ICE BolA	4 <i>Bond Indices</i>					-1.20%	Est. Price Risk to AveCY
				Comprehens	ive Risk Est.	5.52%	Est. Price Risk + CY
				Recapture F	Rate (yrs.)	0.18	Est. Price Risk / CY
					Memo:	1.09%	Total Return YTD

The current yield of the CoCo sector closed the month at 6.72%, which was 25bps lower than last month and 45bps less than the average current yield at the bottom of the last three credit cycles (i.e., 7.16%). The average rebalanced CoCo price of \$94.96 is lower than 2 of the last 3 cycles, which (like the other hybrid sectors) highlights that the term structure of interest rates (i.e., high real US Treasury yields) being the primary reason for discounted prices – the implication of the discount is an embedded **"pull toward par"** and time ages and the prospect of higher coupon resets approach becoming available in less than 3yrs on average. The

implication of a 0.45% current yield increase to 7.16% (the average current yield of the prior bottoms) is an estimated 1.20% price decline using the modified duration of 2.69; then adding back the current book yield (assuming a 12month path) of 6.72% makes the *Comprehensive Risk Estimate* for return in the CoCo sector 5.52%. The recapture rate of the estimated capital risk is about 2 months for CoCos. There was no issuance in the CoCo sector this month.

#### Outlook:

<u>A Fed conundrum</u>: Last month we said that if the Fed cuts rates too soon (i.e., in March) it could impair its credibility as an inflation fighter and forfeit the effectiveness of forward guidance in recruiting markets to assist it; but if the Fed leaves rates too high for too long it could prompt a fiscal fit (i.e., volatility in the US Treasury markets) caused by the rising costs of the massive US debt load – <u>either way, it appears inflation will stay elevated (i.e., above 2%),</u> <u>but the Fed doesn't seem to care as it has indicated this month that it expects to cut rates two additional times for a total of 3 times next year.</u> The bond market has 6 rate cuts priced into next year, which we believe is too generous given the Fed's view that inflation is still too high. So, despite people still begrudgingly living with high prices, the Fed is emboldened to cut rates because labor shortages are no longer frantic, and the economy should grow – it sounds like the Fed's depending more on more supply side expansion to help than demand side contraction in sustaining its low inflation goal. According to the Fed, rates are sufficiently restrictive, yet financial conditions ripped higher to peak at year end – this sounds counterintuitive which is why we think the market is irrationally exuberant in expecting 6 cuts in 2024.

<u>A False Dawn</u>: Neither the bond market nor the equity market is appreciating the need for the Fed to keep interest rates <u>high for longer</u> because fiscal growth pressures (something the Fed cannot directly opine on) are trading against "restrictive" rates pressure. The equity market is taking its cues from Dec-24 SOFR futures in expecting an almost immediate series of rate cuts and has virtually ignored any risk of recession despite a continuously inverted yield curve. So, if

the Fed does indeed get its soft landing, then there will be no recession and certainly no need for an inverted yield curve to continue predicting what won't be coming. Consequently, we expect the 2s10s yield curve to normalize by the end of next year to a moderately positive slope.

#### Implications for Junior Subordinated Capital Securities:

There should be ample opportunities to buy attractive hybrid yields next year – have no fear of missing out on hybrid yields quite yet. Dec-24 SOFR futures should trade back up toward federal funds parity as the year progresses to the election -- we expect that level to finish 2024 more toward 4.50% than its current 3.93% by year end, which means the US Treasury 10yr note should correct as well and make another move up through 4.25% at some point during the year before rallying back under 4% as it anticipates with conviction more rate cuts in 2025.

Our credit team views hybrid credit fundamentals are generally sound and the purchasing power matrix scores of hybrids are even better now than they were this time last year – this, despite the laudable credit performance this year (especially this month).

	Α	В	C	D=B/C	E=D/A
Purchasing Power Matrix: Financials	Mdur	YTW%	5yrBE Inflation%	Inflation Coverage	Inflation Coverage/ Mdur
Retail \$25par (p0p4)	12.45	6.39	2.15	0 2.97	0.24
NoCos (stb8)	3.95	7.17	2.15	3.33	0.84
CoCos (cdlr)	2.69	7.62	2.15	3.54	1.32
More Sr. Fins (e0ba)	4.76	5.22	2.15	8 2.43	<b>0.51</b>

Source: Bloomberg; ICE BolA Bond Indices

- Hybrid yields are higher, breakeven inflation is lower and inflation coverage is up.
- Hybrid yield inflation coverages are generous at 2.98x to 3.54x for junior subordination – shown above. The contingent convertible sector (CoCos) is the winner on *Inflation Coverage* and risk adjusted coverage when factoring in



duration. The NoCo sector wins the silver medal again on both scores. The retail sector measures up too, but one must accept more duration risk in a mostly "fixed-forever" sector structure to get the coverage.

#### In relation to positioning:

- Maintain a defensive orientation by positioning fixed-to-refixed structures and barbelling these discounts with current coupon new issuance which embeds a "pull toward par" backstory to preserve capital and offer the potential for income growth.
- Real hybrid yields are compelling and even more so when we consider subtracting estimated historical credit default risks from real yields shown here in a *Real Yield Matrix*

Real Yield Matrix	Hyb	rids	Corporates		
	Preferreds	CoCos	IG Corps	BIG Corps	
Bloomberg Index	cips+hips	cdlr	c6c0	h0a0	
Mod.Duration	3.95	2.69	6.08	3.65	
Yield-to-Worst	7.17	7.62	5.11	7.69	
Inflation <sup>1</sup> Adjustment	2.15	2.15	2.15	2.15	
Real Yields	5.02	5.47	2.96	5.54	
Default <sup>2</sup> Adjustment	-0.49	-0.49	-0.05	-2.72	
YTW, net, net adj.	4.53	4.98	2.91	2.82	
Composite Rating	BBB2	BB1	BBB1	B1	
Last Month End:	<u>Hyb</u>	rids	Corporates		
	Preferreds	CoCos	IG Corps	BIG Corps	
YTW, net, net adj.	5.18	5.70	3.49	3.61	
Change from Last	숨 -0.65	🕁 -0.72	🛧 -0.58	🛧 -0.79	

Source: Bloomberg; ICE BofA Bond Indices

' Inflation assuption based on the UST5yr breakeven inflation rate

<sup>2</sup> Sprectrum's 10yr annual default study through 2023 to date

• Hybrids offer the most positive double-net real yield opportunity in credit.

- The Fed is likely full stop on rate hikes, though elevated real yields in US treasuries will likely persist well into 2024 because of a higher "terminal rate" being necessary in the new paradigms de-globalization, de-carbonization, and fiscal excess (all inflationary).
- Over the longer term, eventual rate cuts and the market's accommodative reaction function offer insurance against a probable recession next year, but the election will likely impel volatility from materially different visions.
- The structural "pull toward par" discounts should reward hybrid investors who take advantage of today's lower prices and wider than average spreads. Indeed, large sectors of the hybrid markets are not "fixed income", but rather "fixed-to-refixed income".

Phil Jacoby CIO, Spectrum Asset Management January 9th, 2023

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