SPECTRUM
Asset Management

Junior-Subordinated Capital Securities Markets

May 2023 Updates

The bond markets were heavy in May with US Treasury prices retreating and giving back much of what they gained from the risk off flight which resulted from the regional banking system's deposit challenges. There also became a growing uncertainty about whether the Fed would pause its rate hikes later in June as Fed members certainly have diverging opinions. The 30yr bond closed the month yielding 3.86% (19bps higher) and the 10yr note closed yielding 3.65% (22bps higher). Real rates on the front end of the treasury curve (e.g., UST 5yr TIPS) rose by 44bps (to 1.68%); the 5yr implied breakeven inflation rate (i.e., the difference in yields between the 5yr UST and the 5yr Treasury Inflation Protected Security) fell 15bps to close at 2.10%. Clearly, the bond market is thinking the Fed will push up more on rates and the process will win the inflation battle as real rates are rising and inflation breakevens are declining, but time will tell as the backdrop of continued government excess spending is well entrenched after the debt ceiling settlement. The VIX (i.e., Chicago Board Options Exchange Volatility Index) rose 2.1pts 17.9 as the S&P 500 rose to 4180, up 11 points, which is still well above the 20% decline mark (3835) which would (otherwise) suggest that a recession is imminent.

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) fell 1.49% to close yielding 8.76% (34bps higher).
- Global bank credit (measured by ICE BofA ***e0ba*** index) fell 0.96% to close yielding 5.53% (23bps higher).
- The BBB rated 5-10yr corporate sector (measured by ICE BofA ***c6a4*** index) fell 1.59% to close yielding 5.64% (26bps higher).

Review of Market Structure:

The market for hybrids or **global junior-subordinated capital securities** (*i.e.,* "**Jsubs**") as we call them 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 junior subordinated capital securities are comprised of two sub-sets that represent a broad group of global junior-subordinated capital securities, which can be referenced by two ICE BofA indexes: 1) The ICE BofA US All Capital Securities Index (***i0cs***) and 2) The ICE BofA US Dollar Contingent Capital Index (***cdlr***).

Our litmus test for hybrids satisfies two core characteristics:

1) any non-payment of distributions would not 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 (***i0cs***) benchmark of preferred securities represents $323 billion (face amount) of investment grade and below investment grade instruments in both the retail $25par market (37%) and the institutional $1,000par market (63%). The USD Contingent Capital Index of US dollar denominated junior-subordinated capital securities ***(cdlr)*** represents $136 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 $459 billion universe of fixed-rate junior subordinated USD capital securities with preferred securities (measured by ***iocs***) being a 70% subset and contingent capital securities (measured by ***cdlr)*** being a 30% 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 (***i0cs)*** – 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 "gone concern" 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.

The four sub-components of the *i0cs* benchmark that consolidate into the retail and institutional sectors of rated preferred securities are:

1) **ICE BofA Fixed Rate Preferred Index (*p0p1*) @ 45% *of i0cs***
   - Comprised of IG $25par and IG $1,000par (incl. US AT1)
     - ✞ The *p0p1* fell 1.41% this month to close yielding 6.83% (+23bps)
2) **ICE BofA US Capital Securities Index (*c0cs*) @ 24% of *i0cs***
   - Comprised of dated IG $1,000par dated hybrids (excl. US AT1)
     - ✞ The *c0cs* rose 0.19% this month to close yielding 6.83% (+8bps)

3) ICE BofA High-Yield Capital Securities Index (*h0cs*) @ 6% of *i0cs*

- Comprised of BIG $1,000par legacy Tier1 and BIG $1,000par hybrids
  - ✞ The *h0cs* rose 0.47% this month to close yielding 8.00% (+5bps)

4) ICE BofA High Yield Fixed Rate Pfd Index (*p0hy*) @ 25% of i*0cs*

- Comprised of BIG $25par and BIG 1,000par (incl. US AT1)
  - ✞ The *p0hy* fell 2.45% this month to close yielding 9.14% (+32bps)

Overall, the ICE BofA All US Capital Securities Index (***i0cs***) fell 1.17% this month to close yielding 7.47%, which was 20bps higher than last month's closing yield and a spread of +361bps over comparable US Treasury securities (1bp higher).

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 (***cdlr***) is comprised of US dollar denominated constituents (exclusively), which represent 57% 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 0.42% this month to close yielding an

8.56%, which was unchanged from last month and a spread of +468bps over comparable US Treasury securities (20bps lower).

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.

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

Capital Securities Spread Value Matrix	p0p4 (a) Retail	p0p4-e0ba (b) Retail	stb8 (a) NoCo	stb8-e0ba (b) NoCo	cdlr (a) CoCo	cdlr-e0ba (b) CoCo
Sample Periods	03/31/2017 to Date		03/31/2017 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	70	-42	254	142	336	224
Stdev	122	104	49	27	65	38
Monthend	176	33	318	175	429	286
Spread Scores:						
(monthend-ave)/stdev	0.87	0.72	1.31	1.22	1.43	1.63
Δ from Last Month	0.21	0.30	-0.13	0.00	-0.35	-0.48

Source: Bloomberg; ICE BofA 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 option adjusted spread (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 positive for institutional paper and negative for retail paper. The Absolute Spread Score on retail paper widened by 0.21 standard deviations; **the $25par sector is somewhat *undervalued* with a Spread Score of 0.87 standard deviations**

from average. The Absolute Spread Score for the institutional $1,000par preferred securities sector ("NoCos") tightened by 0.13 standard deviations; **NoCos are *undervalued* with a Spread Score of 1.43 standard deviations from average**. The Absolute Spread Score for the CoCo sector tightened by 0.35 standard deviations; **CoCos are *undervalued* with a Spread Score of 1.43 standard deviations from average**. Note that these are statistical positionings and the absolute differentials and price risks between sectors are further considered through the Comprehensive Risk Estimates below.

Implications of Market Activity:

$25par Retail Preferred Securities Sector

The retail preferred securities sector measured by *p0p4* fell $2.91 to $82.55 in somewhat of a capitulation to the regional banking stresses after First Republic was received and sold to JP Morgan to kick-off the month. Yet, despite the turmoil and uncertainties in the US deposit system, the overall retail $25par sector closed May 3.61% higher than its close of 2022. At the end of last year, our Comprehensive Risk Estimate was deeply positive (i.e., 8.90%), which meant that over the next 12mos., the return potential was 8.90% even if the sector's current yield retraced to 6.70% or the average of the last three credit cycle bottoms. There was a point during the beginning of the month where the retail sector had completely retraced January's 13.7% gain but, after markets absorbed the First Republic takeover and saw that the Bank Term Funding Program was more broadly effective, the credit markets rose and spreads tightened from their wides. This month's Comprehensive Risk Estimate from the three prior credit cycles is more positive at 5.61% and the highest it's been so far this year:

Retail Pfds.	Valuation Implosions			Average		Diff. to	
Credit Cycle Bottoms >	2013	2016	2018	Prior Bottoms	Current	Average	
GA10	2.98%	1.64%	2.74%	**2.45%**	3.63%	1.18%	
PCE DEFY	1.48%	0.59%	1.86%	**1.31%**	4.40%	3.09%	
Real UST10yr	1.50%	1.05%	0.88%	**1.14%**	-0.77%	-1.91%	
$25Coupon	6.64%	6.46%	6.05%	**6.38%**	5.41%	-0.97%	
$25Price	$94.06	$98.66	$93.09	**$95.27**	$82.41	-$12.86	
$25Current Yield	7.06%	6.55%	6.50%	**6.70%**	6.56%	-0.14%	
Mdur Worst	9.52	10.44	10.95	**10.30**	12.76	2.46	
CY Spread vs. T10yr	4.08%	4.91%	3.76%	**4.25%**	2.93%	-1.31%	
Source: Bloomberg; ICE BofA Bond Indices						-1.40%	Est. Price Risk to AveCY
				Comprehensive Risk Est.		5.16%	**Est. Price Risk + CY**
				Recapture Rate (yrs.)		0.21	Est. Price Risk / CY
					Memo:	3.61%	Total Return YTD

The current yield of the retail sector closed the month at 6.56%, which was 21bps higher than last month and 14bps 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 293bps which is 131bps less than the average spread of the last three credit cycle bottoms as retail preferred yields are still 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 $82.41 this month and $12.86 lower than the average of the prior bottoms, which means that there is more convexity to the retail market during this cycle than there was during the prior cycles even though yields were higher. The implication of a 0.14% current yield increase to 6.70% (the average current yield of the prior bottoms) is an estimated 1.40% price decrease using the current modified duration of 12.76; then adding back a current book yield (assuming a 12month path) of 6.56% makes the *Comprehensive Risk Estimate* for returns in the retail sector positive at 5.16%. The income recapture rate of the illustrated price loss is 0.21yrs because the market yield is higher than the illustrated price risk indicating the retail sector has more opportunity than risk.

Performance Memos (p0p4 +2.65%):

The primary contributors to the p0p4 performance this month were Wireless Communications ((+0.03%)), Electric Utilities (+0.03%) and Integrated Telecom (+0.02%).

The primary detractors to p0p4 performance this month were Diversified Banks (-0.77%), Regional Banks (-0.64%), and Property and Casualty Insurance (-0.28%).

Year-to-date, below investment grade (BIG) $25pars have underperformed investment grade (IG) paper by 6.11%.

$1,000par Institutional Preferred Securities Sector

The $1,000 par institutional sector of the preferred securities market fell $0.57 as yields rose 9bps to 7.63% this month. The following table illustrates the institutional preferred securities sector's three prior credit cycles compared to closing valuations this month:

Institutional Pfds.	Valuation Implosions			Average		Diff. to	
Credit Cycle Bottoms >	2013	2016	2018	Prior Bottoms	Current	Average	
GA10	2.94%	1.75%	2.74%	**2.48%**	3.63%	1.15%	
PCE DEFY	1.17%	0.59%	1.86%	**1.21%**	4.40%	3.19%	
Real UST10yr	1.77%	1.16%	0.88%	**1.27%**	-0.77%	-2.04%	
Coupon	6.77%	6.43%	5.88%	**6.36%**	5.18%	-1.18%	
Price	$103.96	$99.62	$97.23	**$100.27**	$90.79	-$9.48	
Current Yield	6.51%	6.45%	6.05%	**6.34%**	5.71%	-0.63%	
Mdur Worst	5.90	5.23	4.64	**5.26**	3.96	-1.30	
CY Spread vs. T10yr	3.57%	4.70%	3.31%	**3.86%**	2.08%	-1.79%	
Source: Bloomberg; ICE BofA Bond Indices						-2.51%	Est. Price Risk to AveCY
				Comprehensive Risk Est.		3.20%	**Est. Price Risk + CY**
				Recapture Rate (yrs.)		0.44	Est. Price Risk / CY
					Memo:	1.15%	Total Return YTD

The current yield of the institutional preferred sector closed the month at 5.71%, which was 4bps higher than last month. The $90.79 price of the NoCo sector is $9.48 less than the average price over the last three credit cycles – the implication of the discount is an embedded "pull toward par" and time ages and the prospect of higher coupon resets approach becoming available. The current yield of the sector to 63bps less than the average current yield at the bottom of the last three credit cycles. The implication of a 0.63% current yield increase to 6.34% (the average current yield of the prior bottoms) is an estimated 2.51% price decline using the modified duration of 3.96; then adding back a current book yield (assuming a 12month path) of 5.71% makes the *Comprehensive Risk Estimate* for the NoCo sector equal to a 3.20% horizon return to accept the risk, which is 7bps lower than last month. It would take 0.44yrs to recapture this capital loss estimate with book income. The NoCo sector continues to be in a cushioned valuation position.

Performance Memos (cips -0.07%; hips -0.72%):

The primary contributors to investment grade NoCo (cips) performance this month were Diversified Banks (+0.03%), Diversified Financial Services (+0.03%) and Utilities (+0.02%).

The primary detractors from investment grade NoCo performance were Regional Banks (-0.09%), Brokerage (-0.05%) and Consumer Finance (-0.02%).

The primary contributors to below investment grade NoCo (hips) performance this month were Retailing (+0.31%), Insurance (+0.01%) and Oil & Gas (+0.01%).

The primary detractors from below investment grade NoCo performance were Diversified Banks (-0.30%), Consumer Finance (-0.17%) and Broadcasting (-0.17%).

Year-to-date, below investment grade (BIG) $1000pars underperformed investment grade (IG) paper by 4.54%.

Contingent Capital Securities Sector

The CoCo sector rose $0.38 this month to $88.51 as the sector continues to recover from the blowoff it suffered from the sudden collapse of confidence in Credit Suisse. There is talk of European regulators having investor surveys on how the sector can be improved so as to not create such shock and awe in a bail-in situation but we see no reason to change anything in the structural context of CoCos just because bail-ins hurt. Each bail-in can be a little different from the last and each regulatory regime that receives a failed bank is going to protect its depositors (and perhaps even voters) as responsibly as possible through the bail-in benefits of the capital priorities – and they might even change the rules as regulators do to get what regulators want.

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

CoCo Securities	Valuation Implosions			Average		Diff. to	
Credit Cycle Bottoms >	2013	2016	2018	Prior Bottoms	Current	Average	
GA10	3.01%	1.75%	2.88%	**2.55%**	3.63%	1.08%	
PCE DEFY	1.48%	0.59%	1.86%	**1.31%**	4.40%	3.09%	
Real UST10yr	1.53%	1.16%	1.02%	**1.24%**	-0.77%	-2.01%	
Coupon	7.63%	6.40%	6.78%	**6.94%**	6.22%	-0.72%	
Price	$105.04	$89.12	$96.21	**$96.79**	$88.51	-$8.28	
Current Yield	7.26%	7.18%	7.05%	**7.16%**	7.03%	-0.14%	
Mdur Worst	4.76	5.30	3.95	**4.67**	2.62	-2.05	
CY Spread vs. T10yr	4.25%	5.43%	4.17%	**4.62%**	3.40%	-1.22%	
Source: Bloomberg; ICE BofA Bond Indices						-0.36%	Est. Price Risk to AveCY
				Comprehensive Risk Est.		6.67%	**Est. Price Risk + CY**
				Recapture Rate (yrs.)		0.05	Est. Price Risk / CY
					Memo:	-8.97%	Total Return YTD

The current yield of the CoCo sector closed the month at 7.03%, which was 3bps lower than last month and 14bps less than the average current yield at the bottom of the last three credit cycles (i.e., 7.16%). The current yield spread to treasury 10yr notes is 122bps lower than the average of the last three credit cycle bottoms because 10yr treasury yields are higher than in prior cycles. The CoCo price average of $88.51 is lower than the last 3 three 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. The implication of an 0.14% current yield increase to 7.16% (the average current yield of the prior bottoms) is an estimated 0.36% price decline using the modified duration of 2.62; then adding back the current book yield (assuming a 12month path) of 7.03% makes the *Comprehensive Risk Estimate* for return in the CoCo sector 6.67%. The recapture rate of the estimated capital risk is less than one month for CoCos.

Performance Memos (cdlr +1.00%):

The primary contributors to CoCo performance by country (as CoCos are primarily diversified banks) were United Kingdom (0.35%), France (0.25%) and Switzerland (0.17%).

The primary detractors from CoCo performance were Cayman Islands (-0.09%), Turkey (-0.01%) and China (-0.01%).

Outlook:

The target federal funds rate, after being raised by another 25bps to 5.00% - 5.25% this month, is scheduled for another review in mid-June. The FOMC statement supporting the hike signals a likely pause in June because it deleted the phrase "*in order to attain a stance of monetary policy that is sufficiently restrictive.*" In its place was, ""*In determining the extent to which additional policy firming may be appropriate to return inflation to 2 percent over time, the Committee will…".* This subtly indicates that we are nearing the end of the rate hike cycle especially now that the real federal funds rate (0.90%) is even more positive now that policy rates are up, and inflation is waning.

Here is a review of what we said in December (we highlight where we are or where we should be heading from here):

- Three key questions remain for Fed policy on federal funds:
    1. How high?

Answer: 4.75% - 5.00%

Risk: 5.25% - 5.50%

2. How fast?

Answer: by March 2023

Risk: by June 2023

3. How long?

Answer: hold for 1yr =
March 2024

Risk: hold for 6 months = December 2023

We know that The Fed always gets what the Fed wants, and the Fed wants a PCE Deflator-to federal funds rate gap to show a positive real rate and it has now for the second straight month. The widest this gap got in 2019 (the end of the last hiking cycle) was 0.84% and that brought a pause from the Fed. Given the 90bp gap, we expect the Fed to pause in June on further rate hikes to watch the incoming data, which the Fed expects to slow later this year as consensus is for a recession.

Main takeaways:

- The Fed has achieved its goal by inverting the gap to a positive real funds rate equivalent to prior peaks of its hiking cycles.
- Rate hikes should be done for this cycle unless labor markets strengthen.

Why the rate hikes matter:

- The rate hikes and resultant yield curve inversion make the lower duration fixed-to-refixed sectors generally more attractive than higher duration fixed-forever sectors, and the stronger rally in retail paper compared to institutional paper (i.e., IG retail outperforming IG NoCos by 3.23% this year) is keeping institutional paper in a better value position when considering the lower duration of NoCos.

The high absolute level of rates and deeper yield curve inversion this month continues to create an anomaly where investors can get paid more for less duration when considering the fixed-to-refixed structures typical of NoCos and CoCos – here, capital appreciation potential should be considered in addition to spread scores and the Comprehensive Risk Estimate. Capital appreciation could benefit total return as time ages to a time when coupons get reset higher than current coupons. Here's a look at the multiples of 5yr average implied inflation that are available in hybrid yield-to-worst compared to more senior financials:

	A	B	C	D=B/C	E=D/A
Purchasing Power Matrix: Financials	Mdur	YTW%	5yrBE Inflation%	Inflation Coverage	Inflation Coverage/ Mdur
Retail $25par (p0p4)	12.76	7.06	2.10	3.36	0.26
NoCos (stb8)	3.96	7.66	2.10	3.65	0.92
CoCos (cdlr)	2.62	8.61	2.10	4.10	1.56
More Sr. Fins (e0ba)	4.89	5.54	2.10	2.64	0.54

Source: Bloomberg; ICE BofA Bond Indices

With hybrid yields up and inflation breakevens declining by 15bps this month, inflation coverages further improved from last month and quite robust at 3.36x to 4.10x for junior subordination. 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 structure to retail paper to get the coverage.

Bottomline:

- Though the Fed reiterates its confidence in the banking system, banks are still drawing on the Bank Term Funding Program which indicates deposit stress persists and higher rates are squeezing net interest margins even more this month. We expect some guidance on proposed regulatory changes for banks to come by the end of June. An

FDIC increase in deposit insurance is overdue given the growth in the money supply since 2010.

- Overall, regional banks are a small (i.e., 10%) concentration in the preferred securities universe so regional bank challenges should not have a meaningful direct fundamental impact on the sector, though headlines may drive short term technicals (like First Republic did to start this month).
- There is good value in the junior subordinated sectors based on discounted prices in the retail sector and unique total return prospects for fixed-to-refixed structures that should "pull toward par".

Maintaining a core portfolio defense in positioning structure, liquidity and credit concentrations are our three primary investment objectives this year. Real yields are quite attractive in hybrids and even more so when we consider subtracting estimated historical credit default risks from real yields. Below we assess a more comprehensive view of real yields net of inflation and net of estimated 10yr average default in a *Real Yield Matrix* to double risk adjusted yield comparisons in hybrids, investment grade corporates and below investment grade corporates (i.e., junk bonds):

Real Yield Matrix	Hybrids		Corporates	
	Preferreds	CoCos	IG Corps	BIG Corps
Bloomberg Index	*cips+hips*	*cdlr*	*c6c0*	*h0a0*
Mod.Duration	3.96	2.62	6.23	4.00
Yield-to-Worst	7.66	8.61	5.40	8.83
Inflation[1] Adjustment	2.10	2.10	2.10	2.10
Real Yields	5.56	6.51	3.30	6.73
Default[2] Adjustment	-0.44	-0.44	-0.04	-2.57
YTW, net, net adj.	**5.12**	**6.07**	**3.26**	**4.16**
Composite Rating	*BBB2*	*BB1*	*BBB1*	*B1*
Last Month End:	**Hybrids**		**Corporates**	
	Preferreds	**CoCos**	**IG Corps**	**BIG Corps**
YTW, net, net adj.	5.18	6.21	2.84	3.60
Change from Last	-0.06	-0.14	0.42	0.56

Source: Bloomberg; ICE BofA Bond Indices

[1] *Inflation assuption based on the UST5yr breakeven inflation rate*
[2] *Sprectrum's 10yr annual default study through 2021 adjusted for est. SIVB & CS*

Hybrids offer the most positive double-net real yield opportunity in credit. As the Fed is very likely to take a pause to focus more on the data (now that the gap continues to be inverted), it should keep its more restrictive policy stable and in place until its job is comfortably done on inflation which is biased to wane given higher base rate comparisons are rolling into play. Hybrid yields will probably stay elevated for some time though, especially given the high likelihood of recession from the consistently (deeply) inverted yield curve and net deposit outflow from the banking system. Consequently, the window of opportunities in Hybrids should be available for some time as volatility is likely to elevate with a recession as the banking sector continues to process the changing fundamentals impelled by high rates and prospective regulatory change. In a year when we don't expect duration to be a major contributor to institutional performance, the income accretion component of Hybrids (especially those with QDI) looks compelling compared to core corporates and high yield -- especially net of longer run average default risks. Over a longer term, the combination of more deposit insurance from the FDIC, rate cuts to quell a recession and regulatory change in support of credit should reward hybrid investors who take advantage of today's lower prices and wide spreads.

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